FAA ATO

SPECIFICATIONS

FAA-A80-1102785

February 29, 2012

ATLANTA TRACON – A80
TAMR SITE PREP

Volume I of I

Divisions 01 through 26

Design by:
URS Corp
1000 Abernathy Road
Atlanta, GA 30328

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DIVISION 27 – 33 (NOT USED)

APPENDICES:

SECTION 01 00 00- GENERAL PARAGRAPHS

PART 1 - GENERAL

1.1 PRE BID SITE VISIT

A. The offerer is expected to carefully examine the areas of the proposed work, to see first hand the extent of the work involved. The submission of a proposal will be considered prima facie evidence that the offerer has made such examination and is satisfied as to the conditions to be encountered in performing the work. It is the obligation of the offerer to make their own interpretation of the site subsurface data included in the appendix as to the nature and extent of the work, including materials to be excavated. For access to the site, contact the Contracting Officer indicated in the solicitation.

1.2 TIME FOR COMPLETION

A. The work shall be completed within the time period defined in the General Contract.

1.3 ACTUAL DAMAGES

A. Contractor and his sureties shall be liable for any damages to the Government resulting from his refusal or failure to complete the work within the time fixed in the contract or any extensions thereof, pursuant to the clause of this contract entitled, "AMS Clause 3.10.6-6, Default (Fixed price Construction)."

1.4 DRAWINGS, SPECIFICATIONS, AND OTHER CONTRACT DOCUMENTS

A. The requirements of AMS Clause 3.2.2.3-33, Order of precedence and AMS Clause 3.2.2.3-60, Specifications, Drawings, and Material Submittals shall apply.

B. Drawings showing general outlines and details necessary for a comprehensive understanding of the work form a part of the Contract Documents. The total number and the titles of the drawings constituting the Drawings are given in the index of the Drawings. All work under the Contract shall be performed in all respects in compliance with the requirements of the Contract Documents.

C. The Contract Documents provide for a complete work, and may have been prepared in divisions of various crafts, trades and other categories of work. The Contractor is responsible for the performance of all work under the Contract regardless of any such divisions, and shall ensure that all of the work is performed and completed.

D. The FAA will provide the Contractor with one bound copy of the construction drawings and specifications for the Contractor's use during the execution of the Contract. The Contractor

may reproduce these documents for its use during the performance of the work under this Contract.

E. The Contractor shall maintain at the Site at all times at least one (1) copy of Drawings, Specifications and all other Contract Documents, together with at least one (1) complete set of approved Shop Drawings and approved samples.

F. The Contractor shall make available at the job site one copy of each referenced standard (or as directed by the COR, for the Contractor's and the FAA's use during the time that work is covered by the standard.

G. The Contract, Drawings, Specifications, and all referenced standards cited are essential parts of the Contract requirements. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work.

H. In the event of any conflicts ambiguities, or discrepancies among the Contract Documents, the precedence in resolving such conflicts, ambiguities, or discrepancies shall be as follows:

1. The Schedule of Bid Items (excluding the specifications)
2. Representations and other instructions
3. Contract Clauses
4. Contract modifications
5. Addenda
6. Special Provisions shall govern over General Conditions, Division 1, and Specifications.
7. General Conditions shall govern over Division 1, Specifications, and Drawings.
8. Division 1 shall govern over Specifications and Drawings.
9. Specifications shall govern over Drawings. Drawings take precedence over specifications as to quantity and location. Specifications take precedence over Drawings as to quality of materials and workmanship.
10. Drawings shall govern over Standard Specifications and over standards for testing and materials.
11. On the Drawings, calculated or figured dimensions shall govern over scaled dimensions.
12. Subject to the foregoing provisions of this paragraph, the more stringent requirements shall apply in the event any conflicts cannot be resolved by applying the order of precedence.

I. The Contractor shall not take advantage of any apparent error, omission, discrepancy, or ambiguity on the Drawings or Specifications. If any error, omission, discrepancy, or ambiguity is found by the Contractor in the Drawings or Specifications, the Contractor shall refer the same to the Contracting Officer (CO) prior to beginning work on affected task(s), for interpretation and decision, and such decision shall be final.

J. The CO shall have the right to correct apparent errors or omissions in the Drawings and Specifications and to make such interpretations as he may deem necessary for the proper fulfillment of the Contract Documents. During the course of the work, should any conflicts,

ambiguities, or discrepancies be found that are not addressed or any discrepancies between the Drawings and the Specifications to which the Contractor has failed to call attention before submitting the offer, then the CO will interpret the intent of the Drawings and Specifications and the Contractor hereby agrees to abide by the CO's interpretation and agrees to carry out the work in accordance with the decision of the CO. In such event the Contractor will be held to have included in the offer the most expensive material and/or method of construction.

K. When a material, article, or equipment is designated by a brand name, and more than one brand name is listed, it will be understood that the design is based on one of the brand name listed products. The contractor will be responsible for all coordination necessary to accommodate the material, article, or equipment actually being provided without additional cost to the government.

L. The organization of the contract Documents into divisions, sections and articles, and the arrangement of Drawings does not restrict or limit the Contractor in dividing the Work among Subcontractors or in establishing the extent of work to be performed by any trade.

M. Product and Reference Standards:

1. When descriptive catalog designations including manufacturer's name, product brand name, or model number are referred to in the Contract Documents, such designations shall be considered as being those found in industry publications of current issue on the date of the first advertisement for offers.
2. When standards of the Federal Government, State Department of Transportation, Standards Organization such as ASTM, AASHTO, AWS, or ANSI, trade societies, or trade associations are referred in the Contract Documents by specific date of issue, these shall be considered a part of this Contract. When such references do not bear a date of issue, the current published edition on the date of the first advertisement for offers shall be considered as part of the Contract.
3. Where in the Contract Documents an item is identified by a particular manufacturer's name, model or other code it shall be interpreted to include other manufacturers' product of like and equal quality whether the words "or equal" are included or not.
4. Wherever a particular manufacturer's product is required, to the exclusion of all others, appropriate language is included in the Contract Documents.
5. Wherever the terms, "as directed", "ordered", "permitted", "designate", "as approved", "approved equal", "or equal", "acceptable" and other words of similar meaning which authorize an exercise of judgement are used in the Contract Documents, such judgment shall be vested only in the Architect/Engineer and/or the FAA.

1.5 CONFORMITY WITH DRAWINGS AND SPECIFICATIONS

A. No deviation from the Drawings, Specifications and other Contract Documents shall be permitted without the prior written approval of the RE.

1.6 SUPERVISION AND CONSTRUCTION PROCEDURES

A. At all times during performance of this contract, and until the work is completed and accepted,

the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the CO and has the authority to act for the Contractor.

B. The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the Contract including coordination of the duties of all trades, unless the Contract Documents give other specific instructions concerning these matters.

C. The Contractor shall control its operations and those of its Subcontractors and Suppliers to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

D. Contractor shall lay out all work well enough in advance to avoid conflicts or interferences with other work in progress so that in case of interference the layout may be altered to suit the conditions, prior to the installation of any work and without additional cost to the FAA. The contractor shall be responsible to coordinate all work and take all action as required to avoid conflicts between trades. Unless specifically noted otherwise, establish the exact location of equipment based on the actual dimensions of equipment furnished. Mechanical and electrical work shall be coordinated so that work may proceed according to the following sequence to avoid conflict:

1. Air handling unit placement
2. Gravity Pipes (drains, sewer, storm)
3. Duct routing
4. Cable tray placement
5. Light fixture location
6. Pressure pipe routing
7. Conduit routing

1.7 CORRESPONDENCE

A. Contract correspondence shall be directed to the CO with a copy to the RE. Submittals will be sent direct to the RE with a copy of the transmittal letter to the CO.

1.8 LIST OF SUBCONTRACTORS

A. The Contractor shall, within 10 calendar days after award, furnish to the CO with a copy to the RE, a list of subcontractors showing the type of work each will perform. If all subcontracts have not been awarded when the initial list is submitted, the Contractor shall update the list.

1.9 PRECONSTRUCTION CONFERENCE

A. The CO will arrange a conference at a location, mutually agreeable to the CO and the Contractor as soon as practicable after award of a contract. It will be mandatory that the

Contractor or his designated representative attends.

1.10 WORK NOT INCLUDED

A. Items noted on the drawings, details, or schedules as "N.I.C." (Not in Contract) are not included in this contract.

1.11 REQUIRED INSURANCE

A. Insurance Requirements

Insurance Requirements indicated are typical unless noted otherwise in the Contract

The Contractor shall at its sole expense, procure and maintain in effect at all times during the performance of the Work insurance coverage with insurers and under forms of policies satisfactory to the FAA, and with limits not less than those set forth in this article.

The contractor shall not commence work until he/she has obtained, and the Contracting Officer has approved, all insurance required under this section, nor shall the contractor allow any subcontractor(s) to commence work on a subcontract until all similar insurance required of the subcontractor has been obtained and approved. The successful contractor shall be required to procure and maintain bodily injury, general liability, and property damage liability insurance in his/her own name as protection against damages to persons or property, including injury or death, which may result from his/her performance of the work. The insurance liability and property damages shall not be less than Ten Million ($10,000,000) Dollars single limit.

Automobile Bodily Injury and Property Damage Liability including death shall be not less than Ten Million ($10,000,000) Dollars per occurrence.

The insurance required shall be written for not less than the limits of liability specified in the contract documents, or required by law, whichever is greater. The proof of insurance shall be furnished within ten (10) days from the date of the Notice of Award to the Contracting Officer for approval.

The insurance limits shall be maintained during the entire performance or contract work. No cancellations of any insurance, whether by the insurer or by the insured, shall be effective unless written notice thereof is given to the Contracting Officer at least thirty (30) days prior to the intended effective date thereof, which date has been expressed in the notice. Prior to the effective date of any such cancellation, the contractor shall take out new insurance to cover the policies so canceled. All insurance policies referred to shall be underwritten by companies authorized to do business in the state of construction. The Certification shall be an "ACCORD" certificate with the Contract number and job location identified.
Workmen's Compensation Insurance

This contract shall be void and of no effect unless the contractor secures compensation for the benefit of (and keep insured during the life of this contract) such employees as are required to

be insured by the Workmen's Compensation Insurance Law in the state of construction. The contractor hereby agrees to secure such compensation in the manner prescribed by law. The contractor shall require any subcontractors similarly to provide Workmen's Compensation Insurance for all the latter's employees to be engaged in the work unless such employees are covered by the protection afforded by the contractor's Workmen's Compensation Insurance.

The above-indicated insurance shall be maintained during the entire performance of contract work. No cancellation of any insurance, whether by the insurer or by the insured, shall be effective unless written notice thereof is given to the Contracting Officer at least thirty (30) days prior to the intended effective date thereof, which date has been expressed in the notice. Prior to the effective date of any such cancellation, the contractor shall take out new insurance to cover the policies so canceled. All insurance policies referred to shall be underwritten by companies authorized to do business in the state of construction.

B. FAA Furnished Insurance

1. FAA is not maintaining any insurance on behalf of Contractor covering against loss or damage to the Work or to any other property of Contractor. In the event Contractor maintains insurance against physical loss or damage to Contractor's construction equipment and tools, such insurance shall include an insurer's waiver of rights of subrogation in favor of FAA.

C. Notifications

1. In accordance with the submittal requirements outlined above, Contractor shall deliver the original and two (2) copies of the Certificate(s) of Insurance required by this clause and all subsequent notices of cancellation, termination and alteration of such policies to the CO with a copy to the RE.

D. Certificate of Insurance

1. The scope of coverage shall be shown on the certificate of insurance as "All operations of the Named Insured".

1.12 SECURITY REQUIREMENTS

A. Personnel List: Contractor shall provide the Resident Engineer with a list of Contractor's personnel who will require access to the site. The list shall be kept current during project work. The Contractor shall provide all personnel with readily identifiable numbered badges during the period their access to the site is required. Badges shall be in accordance with FAA Requirements and shall be worn on outer clothes at all times when on FAA property and at work in the site.

B. Security Investigation: Contractor's site superintendent shall submit to an FAA security background check and obtain an official FAA contractor ID badge. Other Contractor personnel may be subject to security investigation by FAA. Upon request by the Resident Engineer, the Contractor shall promptly complete all security forms provided by the Resident Engineer.

C. Communication: The Contractor shall request through the Resident Engineer, a meeting with the facility Manager to discuss planned Contractor activities.

D. Right to Search: Current procedures at FAA facilities include the "right to search". If in the judgment of the authorized security guard a cause to search a vehicle or the person of personnel exists, such search will be made.

1.13 CHANGED CONDITIONS

A. Wherever changed conditions as defined in Contract Clause entitled, "Changes and Changed Conditions" are encountered, and wherever conditions exposed during the course of the work necessitate a change from quantities indicated or specified as either estimated quantities or as a basis for offers, whether or not provision for a change in price for such variation is specified, the CO must be notified in writing and written directions to do so must be obtained before quantities stated in the contract documents are exceeded.

1.14 EXISTING WORK

A. The disassembling, disconnecting, cutting, removal, or altering in any way of existing work shall be carried on in such a manner as to prevent injury or damage to all portions of existing work, whether they are to remain in place, be re-used in the new work, or be salvaged and stored.

B. All portions of existing work which have been cut, damaged, or altered in any way during construction operations shall be repaired or replaced in kind in an approved manner to match existing or adjoining work. All work of this nature shall be performed by the Contractor at his expense and shall be as directed. Existing work shall, at the completion of all operations, be left in a condition as good as existed before the new work started.

1.15 MATERIALS AND EQUIPMENT TO BE SALVAGED

A. Except where specifically specified otherwise herein, or designated on the drawings, all existing materials and equipment which are required to be removed or disconnected to perform the work but are not indicated or specified for use in the new work, shall become the property of the Contractor and shall be disposed of properly. The Government may elect to salvage any or all materials removed by the Contractor by giving prior notice and pricing up materials at job site.

1.16 PAYMENTS TO CONTRACTOR

A. The obligation of the Government to make any of the payments required under any of the provisions of this contract shall, in the discretion of the CO be subject to 1) reasonable deductions on account of defects in material or workmanship, and 2) any claims which the Government may have against the Contractor under or in connection with this contract. Any

overpayments to the Contractor shall, unless otherwise adjusted, be repaid to the Government upon demand.

1.17 PARTIAL OCCUPANCY OR USE (NOT USED)

1.18 UNCOVERING AND CORRECTION OF WORK

A. Uncovering Work

1. If any portion of the Work is covered contrary to the RE's request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the RE be uncovered for his observation and be recovered (if corrections are not required) or be corrected, if applicable, at the Contractor's expense without change in the Contract Time.
2. If a portion of the Work has been covered which the RE or any applicable governmental authority has not specifically requested to observe prior to its being covered, the RE may request to see such Work and it shall be uncovered by the Contractor. If such work is in accordance with the Contract Documents, costs of uncovering and restoration shall, by appropriate Change Order, be charged to the FAA. If such Work is not in accordance with the Contract Documents, the Contractor shall pay such costs unless the condition was caused by the FAA or a separate contractor in which event the FAA shall be responsible for payment of such costs.

B. Correction Of Work

1. The Contractor shall promptly correct Work rejected by the RE or any governmental authority that fails to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including additional testing and inspections and compensation for the RE's services and expenses incurred by the FAA.
2. If, within two years after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established above, or by terms of an applicable special warranty required by the Contract Documents, any of the work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the FAA to do so unless the FAA has previously given the Contractor a written acceptance of that specific condition. This period of two years shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This obligation shall survive acceptance of the Work under the Contract and termination of the Contract. The FAA shall give such notice within a reasonable amount of time after discovery of the condition.
3. The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the FAA.
4. If the Contractor fails to correct nonconforming Work within a reasonable time, the FAA

may correct it in accordance with General Provisions. If the Contractor does not proceed with correction of such nonconforming Work within a reasonable time fixed by written notice from the RE, the FAA may correct or remove such nonconforming work and all costs for such corrections or removals shall be assessed against the Contractor.

5. The Contractor shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, of the FAA or separate contractors caused by the Contractor's performing correction or removal of Work which is not in accordance with the requirements of the Contract Documents.
6. Nothing contained herein shall be construed to establish a period of limitation with respect to other obligations that the Contractor might have under the Contract Documents. Establishment of the time period of two years as described above relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability and damages with respect to the Contractor's obligations other than specifically to correct the Work.

C. Acceptance Of Nonconforming Work

1. If the FAA prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the FAA may do so instead of requiring its removal or correction. If the FAA accepts the Work under such circumstances, the Total Contract Price will be reduced in an equitable manner as determined by the Contracting Officer, whether or not final payment has been made.

D. Terms and Conditions" and "Contract Clauses"

1. Wherever a reference to a clause of the General Provisions or General Conditions occurs in a section of the specifications, it shall be taken to mean the "Terms and Conditions" and "Contract Clauses" having the same title as the referenced General Provisions or General Conditions clause.

1.19 UNDERGROUND UTILITIES - deleted

1.20 LOCATION OF SERVICES

A. The FAA does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the drawings. Any inaccuracy or omission in such information shall not relieve Contractor of its responsibility to protect such existing features from damage or unscheduled interruption of service.

1.21 COOPERATE WITH OTHER ENTITIES

A. Cooperate with the FAA and other public or private utility services, or a utility service of another government agency that may be authorized by the FAA to construct, reconstruct, or maintain such utility services or facilities during the progress of the work. Control operations to

prevent the unscheduled interruption of such utility services and facilities.

1.22 NOTICE TO FAA/OPERATORS

A. Prior to commencing the work in the general vicinity of an existing utility service or facility, Contractor shall notify each FAA/operator in writing of activities that might affect its interests. If, in Contractor's opinion, the FAA/operator's assistance is needed to locate the utility service or facility or the presence of a representative of the FAA/operator is desirable to observe the work, such advice should be included in the notification. Furnish a copy of such written notices to RE.

1.23 EXCAVATION METHODS - deleted

1.24 DAMAGE TO SERVICES

A. Should Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, it shall immediately notify in writing the FAA/operator, appropriate public safety authorities, and the RE and shall take all reasonable measures to prevent further damage or interruption of service. Cooperate with the utility service or facility FAA and the RE continuously until such damage has been repaired and service restored.

1.25 FAILURE TO PROTECT PROPERTY

A. Contractor shall not be entitled to any extension of time or compensation on account of Contractor's failure to protect all facilities, equipment, materials and other property as described herein. All costs in connection with any Improvements or restoration necessary or required by reason of unauthorized obstruction, damage, or use shall be borne by Contractor.

1.26 UTILITY CONTRACTOR LICENSING REQUIREMENTS

A. Contractor shall comply with all state and local requirements for construction of utilities.

1.27 ASBESTOS AND LEAD FREE CERTIFICATION

A. FAA policy is to construct all new facilities without asbestos or lead containing products. The Contractor shall provide a letter on his company's standard letter head stating that to the best of his knowledge no product or material used on this project contains asbestos or lead. The statement shall include the name of the project and the contract number and shall be signed by an officer of the company. The statement shall be furnished within 10 calendar days of the Substantial Completion date. Submission of this statement is a condition for final payment under the contract.

B. Verification: If the FAA suspects the presence of asbestos or lead, tests shall be performed on the material or product at the FAA's expense. If it is determined that the product or material

does contain asbestos or lead, then the contractor shall remove the product or material and replace at his own expense including the expense of the testing and any retesting that may be necessary.

C. Non – Compliance: If the Contractor fails to provide the above statement, then the FAA shall have a complete building survey performed by a qualified testing firm and the costs deducted from the contractor's final payment.

1.28 MATERIAL SAFETY DATA SHEETS (MSDS):

A. The Contractor shall submit to the Resident Engineer Material Safety Data Sheets (MSDS) for all materials and/or products utilized during the course of the project accomplishment. During the course of the project, both the Resident Engineer and the Contractor shall routinely check products utilized on-site to ensure only products which have had MSDS submitted are utilized. Copies of all MSDS shall be turned over to the local FAA office for their records.

1.29 INITIAL SUBMITTALS

A. The following submittals are required to have FAA approval prior to Notice to Proceed.

1.	Section 01 00 00	LIST OF SUBCONTRACTORS, CERTIFICATE OF INSURANCE
2.	Section 01 40 00	CONTRACTOR QUALITY CONTROL
3.	Section 01 52 16	SAFETY PLANS

1.30 KNOWLEDGE SHARING NETWORK (KSN) SITE

The FAA maintains a joint use internet site for the purpose of electronic communication with the contractor. It is a requirement to use this KSN site for submittals, RFI's and other communications with the government. The government will provide access and required passwords to allow access to this site.

1.31 UTILITY CONTACTS - deleted

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 01 00 00

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SECTION 01 10 00 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 WORK COVERED BY CONTRACT DOCUMENTS

A. Work of this Contract comprises general construction and reconfiguration of various rooms and space within the Atlanta Large TRACON (A80). This is preparatory work that is required for the TAMR equipment installation.

1.2 CONTRACT METHOD

A. Construct the Work under a single lump sum contract, subject to the provisions of Earned Value Management.

1.3 WORK SEQUENCE

A. Construction Work stages shall be defined by the Contractor. Provide detailed schedule and sequence of activities for approval by FAA.

1.4 CONTRACTOR USE OF PREMISES

A. The FAA shall have the right of unlimited access to the premises.

B. Other agencies may be constructing other improvements during a portion or all of this construction. Contractor shall coordinate with other agencies contractors.

C. Assume full responsibility for protection and safekeeping of project materials under this Contract.

D. Obtain and pay for use of additional storage or work areas needed for operations under this Contract.

E. Parking is allowed only in areas designated by the RE.

1.5 ACCESS TO SITE

A. Contractor's access to site shall be as directed by the RE. The Contractor shall not permit any unauthorized construction personnel or traffic on the site. The Contractor shall be responsible for traffic control to and from the various construction areas on the site. Directional signing at the access gate and along the delivery route to the storage area or work site shall be as directed by the RE. The Contractor will not be allowed to close any traffic lanes nor will the Contractor

be allowed to impede the flow of traffic.

1.6 MATERIALS DELIVERY TO THE SITE

A. All material orders for delivery to the site shall use as a delivery address the facility.

B. Contractor shall prepare, and submit to the RE for approval, a delivery plan for all types of delivery. The plan shall define the procedures that will be used to accommodate delivery traffic for all types of deliveries (e.g. tractor trailer, city delivery truck, etc) and any staging areas that will be used. Normal flow of traffic, into and out of the facility, shall not be impeded. Deliveries shall be suspended at the direction of the RE.

C. The Contractor is responsible for immediate clean-up of any debris deposited along the access road as a result of his/her construction traffic.

1.7 CONSTRUCTION AREA LIMITS

A. The limits of construction material storage areas, equipment storage areas, parking areas, and other areas as required by the Contractor shall be as approved by the RE. Should Contractor find it necessary or advantageous to use any additional offsite area for any purpose whatsoever, Contractor shall, at its expense, provide and make its own arrangements for the use of such additional offsite areas.

B. Erect and maintain fencing, marking, and/or warning devices suitable for both day and night use to delineate the perimeter of all such areas.

1.8 PERMITS AND FEES

A. There are no known permits for this project.

1.9 BUILDING PERMIT APPLICATIONS

A. There are no known permits for this project.

1.10 CERTIFICATE OF OCCUPANCY

A. Contractor will not be required to obtain a Certificate of Occupancy from the City.

1.11 SUBMITTALS

A. Delivery Plan as per section 1.6.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 01 10 00

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SECTION 01 10 12 - CONSTRUCTION ADMINISTRATION FORMS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

A. The following listed forms are hereby made a part of the Construction Documents.

PART 2 – NOT USED

2.1 INDEX OF CONSTRUCTION ADMINISTRATION FORMS:

RFI Standard Form
Submittal Approval Form
FAA Life Safety System Inspection and Test Report
FAA Pre-Construction and Maintenance Project Safety and Health Checklist
Certificate of Substantial Completion (CoSC)
Substantial Completion Acceptance (SCA)
Partial Occupancy/Use Agreement (POUA)
Job Memorandum (JM)
Lock Out/Tag Out Procedure (See Division 26)

PART 3 - EXECUTION

A. During the administration of the Contract, the Contractor will be required to complete various construction administration forms as a part of the Management System. These forms are identified above and will be issued at the Pre-Construction Conference. These forms may be revised during the construction period and the Contractor will be required to comply with any such revisions.

END OF SECTION 01 10 12

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Federal Aviation Administration

Request For Information
No. 000

Title: _____

From:	Project:	To:
Contractor	**JOB TITLE**	
Contractor address	Job Location	
	Contract:	Phone:
Phone:		Fax:
Fax:		RE:
Contact:		

Drawing or Spec:	Date Started:	Priority: Normal	Potential Cost Impact? ☐ Yes ☐ No
	Date Required:		Potential Schedule Impact? ☐ Yes ☐ No
Attachments? No	Date Completed:		If yes to either, explain below.

Question (Include Potential Impacts):

Response:

By: , FAA

Date:

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APPROVAL OR DISAPPROVAL OF CONTRACTOR'S MATERIALS OR SHOP DRAWINGS	DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

1. TO:

Contractor
Address

Tel: Fax:

ATTN:

2. DATE CONTRACTOR'S SUBMITTAL RECEIVED:	3. DATE SUBMITTAL RETURNED:
4. GOV'T TRANS. NO.	5. CONTRACTOR'S TRANS. NO.
6. PROJECT NAME	
7. CONTRACT NUMBER	

8. TRANSMITTAL REFERENCE TO CONTRACT DRAWINGS and/or SHOP DRAWINGS

9. TRANSMITTAL REFERENCE TO CONTRACT DRAWINGS AND PARAGRAPH NUMBER and/or CHANGE ORDER NUMBER

10. FACTS:

Gentlemen: We are returning herewith the following Submittal Data:

A. ITEM NO.	B. NO. COPIES	C. NAME OF SUPPLIER	D. TYPE OF MATERIAL OR EQUIPMENT	E. APPROVAL		F.	
				AS SUBMITTED	AS NOTED*	NOT APPROVED †	REVISE AND RESUBMIT
				☐	☐	☐	☐
				☐	☐	☐	☐
				☐	☐	☐	☐
				☐	☐	☐	☐
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				☐	☐	☐	☐

G. REMARKS

H. STIPULATIONS

*Data marked "Approved as Noted" is satisfactory, contingent upon contractor acceptance of corrections and/or notations, and if accepted does not require re-submittal.

†Data marked "Not Approved" does not meet job requirements, and contractor must re-submit on proper basis.

Approval of Data does not obviate Contractor Responsibility for correct take-off or installation clearance.

Carbon Copies Transmitted To:

Sincerely,

Resident Engineer

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FAA Life Safety System Inspection & Test Report

PART 1 FIRE SYSTEM LOCATION, NOTIFICATION OF TEST & VISUAL INSPECTION

PROTECTED PROPERTY:

_____

_____

_____

PERSON RESPONSIBLE: _____ TITLE: _____
PHONE: _____ FAX: _____

Check each box that applies to the fire system being tested.

- ☐ STANDARD ATCT
- ☐ NON-STANDARD ATCT
- ☐ SMO
- ☐ SSC
- ☐ AFSS
- ☐ PROPERTY FAA OWNED
- ☐ PROPERTY FAA LEASED
- ☐ ARSR SITE
- ☐ SITE OCCUPIED
- ☐ SITE UNOCCUPIED

OTHER _____

NOTIFICATION PRIOR TO FIRE SYSTEM TESTING:

Notify the following Individuals and/or Office of the fire system test.

- ☐ FIRE DEPARTMENT
- ☐ A. F. MANAGER
- ☐ TERMINAL MANAGEMENT
- ☐ CENTRAL STATION
- ☐ SMO SAFETY OFFICER
- ☐ AIR TRAFFIC MANGER
- ☐ BUILDING OCCUPANTS
- ☐ REGION SAFETY MANAGER
- ☐ AIRPORT MANAGEMENT

OTHER

VISUAL INSPECTION OF SYSTEM PRIOR TO TESTING:

Visually inspect the following Prior to Testing.

- ☐ CONTROL PANEL(S)
- ☐ PANEL SWITCHES
- ☐ PRESSURIZATION FAN(S)
- ☐ BATTERY CHARGER TEST
- ☐ ELEVATOR EQUIPMENT
- ☐ DACT
- ☐ REMOTE DETECTOR INDICATOR
- ☐ SYSTEM MODIFICATIONS
- ☐ PANEL LIGHTS
- ☐ SYSTEM BATTERIES
- ☐ LOAD VOLTAGE
- ☐ HVAC SYSTEM(S)
- ☐ AUDIO DEVICES
- ☐ SUPPRESSION SYSTEM(S)
- ☐ SYSTEM RECORDS
- ☐ EMERGENCY GEN.
- ☐ PULL STATIONS
- ☐ POWER SUPPLIES
- ☐ SMOKE DETECTORS
- ☐ STROBES
- ☐ REMOTE ANNUNCIATOR
- ☐ PRINTER
- ☐ RECORD DRAWINGS
- ☐ OPERATORS MANUAL

OTHER _____

Make notations below in the comment section for items which are deficient and noted during the visual inspection. Additional space is available for notation of deficiencies in each section below.

WARNING:

IF THIS SYSTEM PROVIDES DETECTION AND/OR CONTROL FOR AUTOMATIC SUPPRESSION, THE AGENT RELEASE PORTION OF THE SUPPRESSION SYSTEM(S) *MUST* BE *DISABLED* PRIOR TO TESTING *ANY* SYSTEM INITIATING DEVICES TO PREVENT INADVERTENT AGENT RELEASE!

THIS FACILITIES HVAC SHUTDOWN, ELEVATOR RECALL AND PRESSURIZATION FAN SYSTEMS MUST BE TESTED ANNUALLY, TO INSURE PROPER OPERATION. AVOID UNNECESSARY CYCLING OF THESE SYSTEMS AND DISABLE THE CONTROLLING RELAYS OR ACTIVATE THE PREPROGRAMMED BY-PASS SWITCH AFTER INITIAL TESTING AND VERIFICATION OF EACH.

PART 2 FIRE SYSTEM PANEL DATA & SERVICE INFORMATION

LOCATION OF THE FIRE ALARM PANEL/FIRE COMMAND CENTER:

SYSTEM MANUFACTURER

MODEL NO.: DATE SYS. COMMISSIONED:

SERVICE COMPANY: PHONE: FAX:

ADDRESS:

CONTACT: SERVICE CONTRACT: ☐ YES NO

NICET CERT. NO.: NICET LEVEL: STATE LICENSE NO.:

DATE SERVICE STARTED: DATE SERVICE DEFAULTS:

DATE OF LAST SYSTEM SERVICE: DATE OF LAST SYSTEM TEST:

DOES THE PANEL APPEAR TO BE OPERATING PROPERLY (NORMAL CONDITION)	☐ YES	☐ NO
IS THE FIRE PANEL A POWER LIMITED SYSTEM	☐ YES	☐ NO
ARE ALL CIRCUITS SUPERVISED	☐ YES	☐ NO
IS A SYSTEM SMOKE DETECTOR PROVIDED TO PROTECT THE PANEL	☐ YES	☐ NO
IS ADEQUATE BATTERY BACK-UP PROVIDED AS PER NFPA 72	☐ YES	☐ NO
IS SURGE SUPPRESSION PROVIDED AT THE AC CIRCUIT BREAKER	☐ YES	☐ NO
IS THE 110 VOLT CIRCUIT PERMANENTLY LABELED "FIRE ALARM"	☐ YES	☐ NO
IS AN EMERGENCY GENERATOR PROVIDING BACK-UP POWER	☐ YES	☐ NO
IS THERE MORE THAN ONE SYSTEM PANEL INSTALLED	☐ YES	☐ NO

PANEL POWER SUPPLY, PRIMARY (MAIN), NOMINAL VOLTAGE _____, AMPS _____

OVERCURRENT PROTECTION, TYPE _____, AMPS _____, LOCATION _____

POWER DISCONNECT MEANS _____, LOCATION _____, LOCKOUT _____

SECONDARY (STANDBY) POWER _____ STORAGE BATTERY, AMP-HOUR RATING _____

CALCULATED CAPACITY TO OPERATE SYSTEM, IN HOURS: 4 _____ 24 _____ 60 _____

BATTERY TYPE:

☐ DRY CELL ☐ NICKEL CADMIUM ☐ SEALED LEAD ACID ☐ LEAD ACID ☐ OTHER _____

ENGINE GENERATOR DEDICATED TO THE FIRE ALARM SYSTEM POWER CIRCUIT ☐ YES ☐ NO

TRANSIENT SUPPRESION:

120V CIRCUIT DEVICE TYPE:	QTY.	LOCATION:
INITIATION CIRCUIT TYPE:	QTY.	LOCATION:
AUDIO CIRCUIT TYPE:	QTY.	LOCATION:
VISUAL CIRCUIT TYPE:	QTY.	LOCATION:
SIGNALING LINE CIRCUIT TYPE:	QTY.	LOCATION:
OTHER:		

A transient suppression device (listed for operation with the system) is required for each circuit that exits or enters a building. The device shall be mounted in a junction box at the point of exit and entry. Label each circuit being protected.

PART 1 AND 2 DEFICIENCIES NOTED AND/OR COMMENTS:

NOTE: The comment portions of this form are required to have an entry. If a deficiency does not exist then the Technician shall enter "A deficiency has not been noted." If more than one alarm panel exists, complete this form for each.

PART 3 DIGITAL ALARM COMMUNICATOR & MONITORING COMPANY

IS THIS FIRE ALARM SYSTEM MONITORED VIA A DACT ☐ YES ☐ NO
IS THE DACT A DUAL CHANNEL ☐ YES ☐ NO

IS THE SPRINKLER OR SUPPRESSION SYSTEM (IF EXISTING) MONITORED:	☐ YES	☐ NO
IS THE DACT A FOUR CHANNEL, DUAL LINE DACT (REQUIRED FOR SPRINKLER)	☐ YES	☐ NO
IS THE DACT POWER FROM THE CONTROL PANEL	☐ YES	☐ NO
IS THE POWER SUPERVISED	☐ YES	☐ NO
IS THERE A DEDICATED PRIMARY PHONE LINE	☐ YES	☐ NO
IS THERE A SECONDARY PHONE LINE	☐ YES	☐ NO

DACT MANUFACTURER: _____ MODEL NO.: _____

NAME OF CENTRAL STATION: _____ POINT OF CONTACT: _____

ADDRESS: _____

ACCOUNT # _____ PHONE: _____ FAX: _____

DATE CONTRACT STARTED: _____ DATE CONTRACT DEFAULTS: _____

LIST NAME AND PHONE NO. OF EACH PERSON(S) TO BE CONTACTED BY THE CENTRAL STATION:

_____

_____

_____

NOTED DACT DEFICIENCIES AND/OR COMMENTS:

_____

_____

_____

_____

NOTE: The comment portions of this form are required to have an entry. If a deficiency does not exist then the Technician shall enter "A deficiency has not been noted.

PART 4 INITIATION DEVICES AND INITIATING. OR SIGNALING CIRCUIT TYPE

Initiating devices, are those system(s) devices which *initiate* an alarm or supervisory condition. An Initiating Device Circuit (IDC) is a *hard-wired* (non-addressable) circuit(s), which employees initiating (non-addressable) devices, to send an alarm condition to the fire panel. A Signaling Line Circuit (SLC) is a circuit(s) which employees *addressable* initiating devices (for the purpose of this section). A fire system configuration may consist of both *hard-wired* and *addressable* circuits. Additional information is available to complete this section, in the NFPA 72, Section 23.5 and 12.3 for IDC hardwired circuits and Section 23.6 and 12.3 for SLC addressable signaling line circuits. Check those boxes below that apply to the initiating devices and circuits. PART 6 of this report is for panel to panel communications and/or LCD/Printer communications. In filling out the device chart below wire class should be either "Class A", "Class B", or "Class X".

ADDRESSABLE SYSTEM, **SIGNALING LINE CIRCUIT (SLC):**

☐ ADDRESSABLE ☐ (CLASS A) ☐ (CLASS B) ☐ (CLASS X)

TOTAL QTY. OF ADDRESSABLE CIRCUITS _____ EACH CIRCUIT CAPACITY (MAX) _____

QTY. OF SPARE ADDRESSABLE POINTS _____ ON CIRCUIT(S) _____

PANEL CAPACITY FOR ADDITIONAL MODULES _____

ADDRESSABLE SYSTEM SOFTWARE:

REVISION NUMBER: _____ REVISION DATE: _____

ALARM INITIATING, SUPERVISORY & CONTROL DEVICE INFORMATION:

Information of the fire alarm Circuits, Class and Style is noted below. For additional guidance regarding the characteristics of each circuit noted, refer to 12.3 and 23.6 for SLC in NFPA 72.

SYSTEM POINT OR DEVICE TYPE	QUANTITY OF DEVICE TYPE:	WIRE CLASS: (A, B, or X)	CIRCUIT NUMBER:
ADDRESSABLE SYSTEM:			
MANUAL STATIONS			
IONIZATION DETECTORS			
PHOTOELECTRIC DETECTORS			
ION DUCT DETECTORS			
PHOTO DUCT DETECTORS			
FIXED TEMP HEAT DETECTORS			
R OF R HEAT DETECTORS			
RATE COMPENSATED DETECTORS			
MONITOR OR CONTROL MODULE FOR:			
FIXED TEMP HEAT DETECTOR			
BEAM DETECTORS			
UV/IR DETECTORS			
COMBINATION DETECTOR			
WATERFLOW ALARM SWITCH			
WATER SUPERVISORY SWITCH			
POST INDICATOR VALVE			
WATER SYSTEM AIR PRESSURE			
SUPPRESSION PANEL ALARM			
SUPPRESSION PANEL TROUBLE			
SUPPRESSION PANEL RELEASE			
SUPPRESSION PRESSURE SWITCH			
SUPPRESSION SUPERVISORY			
SECURITY CONTACT			
STAIRWELL PRESSURIZATION FAN ON			
STAIRWELL PRESSURIZATION FAN OFF			
STAIRWELL PRESSURIZATION MANUAL			
EMERGENCY GENERATOR ON			
EMERGENCY GENERATOR OFF			
ELEVATOR RECALL (PRIMARY)			
ELEVATOR RECALL (SECONDARY)			
FIRE PUMP POWER			
FIRE PUMP TROUBLE			
FIRE PUMP AUTO.			
FIRE PUMP RUNNING			
FIRE PUMP OFF			
FIE PUMP PHASE REFFERSAL			
OTHER ALARM _____			
OTHER TROUBLE _____			
OTHER SUPERVISORY _____			
OTHER _____			

HARDWIRED SYSTEM, INITIATING DEVICE AND SUPERVISORY CIRCUIT (IDC):

☐ HARDWIRED ☐ CLASS A ☐ CLASS B

TOTAL QTY. OF HARDWIRED CIRCUITS_____ QTY. OF SPARE CIRCUITS _____

PANEL CAPACITY FOR ADDITIONAL ZONE MODULES_____

ALARM INITIATING & SUPERVISORY DEVICE INFORMATION:

Information of the fire alarm Circuits, Class and Style is noted below. For additional guidance regarding the characteristics of each circuit noted, refer to 12.3 and 23.5 for IDC in NFPA 72.

SYSTEM POINT OR DEVICE TYPE TYPE:	**QUANTITY OF DEVICE** (A or B)	**WIRE CLASS:** (Letter)	**CIRCUIT OR ZONE**
HARDWIRED SYSTEM:			
MANUAL STATIONS			
IONIZATION DETECTORS			
PHOTOELECTRIC DETECTORS			
ION DUCT DETECTORS			
PHOTO DUCT DETECTORS			
FIXED TEMP HEAT DETECTORS			
R OF R HEAT DETECTORS			
RATE COMPENSATED DETECTORS			
FIXED TEMP HEAT DETECTOR			
BEAM DETECTORS			
UV/IR DETECTORS			
COMBINATION DETECTOR			
WATERFLOW ALARM SWITCH			
WATER SUPERVISORY SWITCH			
POST INDICATOR VALVE			
WATER SYSTEM AIR PRESSURE			
SUPPRESSION PANEL ALARM			
SUPPRESSION PANEL TROUBLE			
SUPPRESSION PANEL RELEASE			
SUPPRESSION PRESSURE SWITCH			
SUPPRESSION SUPERVISORY			
SECURITY CONTACT			
STAIRWELL PRESSURIZATION FAN ON			
STAIRWELL PRESSURIZATION FAN OFF			
STAIRWELL PRESSURIZATION MANUAL			
EMERGENCY GENERATOR ON			
EMERGENCY GENERATOR OFF			
ELEVATOR RECALL (PRIMARY)			
ELEVATOR RECALL (SECONDARY)			
FIRE PUMP POWER			
FIRE PUMP TROUBLE			
FIRE PUMP AUTO			
FIRE PUMP RUNNING			
FIRE PUMP OFF			
FIE PUMP PHASE REFFERSAL			
OTHERALARM_____			
OTHER TROUBLE_____			
OTHER SUPERVISORY_____			
OTHER_____			

NOTED SIGNALING DEVICE CIRCUIT (SLC), INITIATING DEVICE CIRCUIT (IDC) AND INITIATING DEVICE OR SUPERVISORY DEVICE DEFICIENCIES AND COMMENTS:

NOTE:The comment portions of this form are required to have an entry. If a deficiency does not exist then the Technician shall enter "A deficiency has not been noted".

PART 5 NOTIFICATION APPLIANCE CIRCUIT (NAC)

Notification Appliance Circuits (NAC) are those system circuits that employ notification appliance device(s) which provides both *audio* and *visual* notification, in the event of a fire. Section 12.3 and 23.7 of the NFPA 72, shall provide additional information in regards to circuit performance capabilities. Refer to Section 12.3 for NAC Class configurations. Other documents that effect the fire system audio/visual devices are as follows:

1. ANSI S3.41, *American National Standard Audible Emergency Evacuation Signal,* which requires that the fire alarm signals be *distinctive* in sound from other signals and not to be used for any other purpose. See NFPA 72, 18.4.2

2. The use of the three-pulse temporal pattern fire alarm evacuation signal has been adopted by both the American National Standard, ANSI S3.41 (as referenced above) and International Standard, ISO 8201, *Audible Emergency Evacuation Signal.* Information regarding performance, location, and mounting of Notification Appliance(s) is available in NFPA 72, Chapter 6. For control and power supplies refer to Chapter 1 and Chapter 3.

VISUAL STROBE DEVICES:

Strobes shall be UL *labeled* and the label shall indicate compliance with UL 1971, *Signaling Applications for the Hearing Impaired.* Further details are available in the NFPA 72, Chapter 18.4, regarding strobe flash rate and intensity. Spacing information, for strobe placement in room, is available in the NFPA 72 Paragraph 18.5.4, Tables 18.5.4.3.1(a), 18.5.4.3.1(b), and Figures 18.5.4.3.1. Spacing information for strobe placement in corridors is available in Chapter 18.5.4.4.

STROBE CIRCUIT NUMBER	**STROBE CIRCUIT CLASS:** (A or B)	**IS CIRCUIT SUPERVISED AS REQUIRED PER NFPA 72:**	**QTY. OF STROBES PER CIRCUIT:**	**POWER (AMPS) REQUIRED TO DRIVE CIRCUIT:**
# 1				
# 2				
# 3				
# 4				
# 5				
# 6				
# 7				
# 8				
# 9				
# 10				
# 11				
# 12				
# 13				
# 14				
# 15				
# 16				
# 17				
# 18				
# 19				
# 20				
# 21				
# 22				
# 23				
# 24				
# 25				
# 26				
# 27				
# 28				
# 29				
# 30				

TOTAL POWER (IN AMPS) CONSUMED BY THE VISUAL CIRCUIT(S) _____

POWER (IN AMPS) AVAILABLE AT THE CONTROL PANEL FOR THE CIRCUIT(S) _____

IS ADEQUATE BATTERY BACK-UP PROVIDED FOR THE CIRCUITS LISTED ☐ YES ☐ NO

ARE THE CIRCUITS LISTED POWERED BY ONE FIRE CONTROL PANEL ☐ YES ☐ NO

ARE ADDITIONAL PANELS EMPLOYED TO PROVIDE CIRCUIT POWER ☐ YES ☐ NO

ARE THE ADDITIONAL PANELS SUPERVISED BY THE MAIN PANEL ☐ YES ☐ NO

ARE THE ADDITIONAL PANELS PROTECTED WITH A SYSTEM DETECTOR ☐ YES ☐ NO

ARE THE ADDITIONAL PANELS EQUIPPED WITH BATTERY BACK-UP ☐ YES ☐ NO

IS ADEQUATE BATTERY BACK-UP PROVIDED FOR THE PANELS ☐ YES ☐ NO

ARE THE ADDITIONAL PANELS EQUIPPED WITH SURGE SUPPRESSION	☐ YES	☐ NO
ARE STROBES INSTALLED THROUGHOUT THE FACILITY*	☐ YES	☐ NO
ARE STROBES INSTALLED IN ONLY PART OF THE FACILITY	☐ YES	☐ NO
ARE THE STROBES INCANDESCENT (FLASHLIGHT TYPE BULB)	☐ YES	☐ NO
ARE THE STROBES XENON TYPE (ELONGATED TYPE BULB)	☐ YES	☐ NO
ARE THE STROBES COMPLIANT WITH UL 1971 (LABELED)	☐ YES	☐ NO

* Strobe placement shall comply with the above referenced sections of the NFPA 72 as applicable.
For additional circuits fill out another page 8 of this form and attach.

NOTED VISUAL APPLIANCE AND/OR NOTIFICATION APPLIANCE CIRCUIT DEFICIENCIES AND COMMENTS:

NOTE: The comment portions of this form are required to have an entry. If a deficiency does not exist then the Technician shall enter "A deficiency has not been noted.

AUDIO DEVICES AND CIRCUITS:

TRACON Rooms and Traffic Control Rooms which must remain in operation during the investigation period of a reported fire, shall not be required to meet the dBA levels of Audio notification noted in NFPA 72, Chapter 18.4.3.1. Chimes and/or Visual devices shall be employed in those areas. Notification Appliance Circuits in the noted areas, shall be programmed to be silenced, while the visual signals in the remainder of the facility continue. Visual notification circuits in the remainder of the facility shall continue to signal an alarm, until the Fire Alarm Control Panel, is clear of all fire conditions. Any subsequent Alarm from a fire initiation device shall resound the audio and visual devices.

For areas of general occupancy, Audible signals shall have a sound level of not less than 75 dBA at a distance of 10 feet from the audio device. The sound level of the audio device shall be 15 dBA above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds (whichever is greater), measured 5 feet from above the floor in the occupiable area. The sound level of an audio device shall not exceed 110 dBA. Refer to NFPA 72, Chapter 18.4.8 for audio device location.

AUDIO CIRCUIT NUMBER	**AUDIO CIRCUIT CLASS:** (A or B)	**IS CIRCUIT SUPERVISED AS REQUIRED PER NFPA 72:**	**QTY. OF DEVICES PER CIRCUIT:**	**POWER** (AMPS) **REQUIRED TO DRIVE CIRCUIT:**
# 1				
# 2				
# 3				
# 4				
# 5				
# 6				
# 7				
# 8				
# 9				
# 10				
# 11				
# 12				
# 13				
# 14				
# 15				
# 16				
# 17				
# 18				
# 19				
# 20				
# 21				
# 22				
# 23				
# 24				
# 25				
# 26				
# 27				
# 28				
# 29				
# 30				

TOTAL POWER (IN AMPS) CONSUMED BY THE AUDIO CIRCUIT(S)		
POWER (IN AMPS) AVAILABLE AT THE CONTROL PANEL FOR THE CIRCUIT(S)		
IS ADEQUATE BATTERY BACK-UP PROVIDED FOR THE CIRCUITS LISTED	☐ YES	☐ NO
ARE THE CIRCUITS LISTED POWERED BY ONE FIRE CONTROL PANEL	☐ YES	☐ NO
ARE ADDITIONAL PANELS EMPLOYED TO PROVIDE CIRCUIT POWER	☐ YES	☐ NO
ARE THE ADDITIONAL PANELS SUPERVISED BY THE MAIN PANEL	☐ YES	☐ NO
ARE THE ADDITIONAL PANELS PROTECTED WITH A SYSTEM DETECTOR	☐ YES	☐ NO
ARE THE ADDITIONAL PANELS EQUIPPED WITH BATTERY BACK-UP	☐ YES	☐ NO
IS ADEQUATE BATTERY BACK-UP PROVIDED FOR THE THOSE PANELS	☐ YES	☐ NO
ADDITIONAL PANELS EQUIPPED WITH SURGE SUPPRESSION	☐ YES	☐ NO
ARE AUDIO DEVICES INSTALLED THROUGHOUT THE FACILITY *	☐ YES	☐ NO
ARE AUDIO DEVICES INSTALLED IN ONLY A PORTION OF THE FACILITY	☐ YES	☐ NO
ARE THE AUDIO DEVICES ALL OF THE SAME TYPE (HORN, BELLS, CHIMES, ETC)	☐ YES	☐ NO
ARE THE AUDIO DEVICES COMPLIANT WITH NFPA 72	☐ YES	☐ NO
ARE THERE ANY SPARE AUDIO/VISUAL CIRCUITS AVAILABLE ON THE SYSTEM	☐ YES	☐ NO

* Note the exceptions allowed for TRACON Rooms, Control Rooms, etc.

For additional circuits fill out another page 10 and 11 of this form and attach.

NOTED AUDIO APPLIANCE AND/OR NOTIFICATION APPLIANCE CIRCUIT DEFICIENCIES AND COMMENTS:

NOTE: The comment portions of this form are required to have an entry. If a deficiency does not exist then the Technician shall enter "A deficiency has not been noted."

PART 6 REMOTE ANNUNCIATION TYPE & CIRCUIT

Check those boxes that apply.

☐ ADDRESSABLE ALPHA/NUMERIC	☐ HARDWIRED ALPHA/NUMERIC
☐ GRAPHIC ANNUNCIATOR	☐ HARDWIRED DIRECTORY ANNUNCIATOR
☐ CLASS A	☐ CLASS B
☐ SERIAL PRINTER(S) QTY. _____	☐ OTHER _____

ARE THE ANNUNCIATION DEVICES SUPERVISED	☐ YES	☐ NO
ENTRY EQUIPPED WITH AN ANNUNCIATOR	☐ YES	☐ NO
ANNUNCIATORS EQUIPPED WITH AN ALARM SILENCE	☐ YES	☐ NO
ANNUNCIATORS EQUIPPED WITH A SYSTEM RESET SWITCH	☐ YES	☐ NO

ADDRESSABLE SYSTEM ANNUNCIATORS EQUIPPED WITH ACKNOWLEDGE ☐ YES ☐ NO

NOTED REMOTE ANNUNCIATOR DEFICIENCIES AND COMMENTS:

NOTE: The comment portions of this form are required to have an entry. If a deficiency does not exist then the Technician shall enter "A deficiency has not been noted."

PART 7 VOICE EVACUATION SYSTEM CONTROLS AND DEVICES

VOICE EVACUATION SYSTEM CONTROLS:

VOICE PANEL LOCATION: _____

PANEL MANUFACTURER: _____ MODEL NO.: _____

DOES THE PANEL APPEAR TO BE OPERATING PROPERLY (NORMAL CONDITION)	☐ YES	☐ NO
IS THE PANEL EQUIPPED WITH A MIC.	☐ YES	☐ NO
IS THE PANEL EQUIPPED WITH A FIRE PHONE SYSTEM	☐ YES	☐ NO
ARE EXTRA FIRE PHONES AVAILABLE QTY. _____	☐ YES	☐ NO
ARE ALL CIRCUITS SUPERVISED	☐ YES	☐ NO
IS A SYSTEM SMOKE DETECTOR PROTECTING THE PANEL	☐ YES	☐ NO
IS ADEQUATE BATTERY BACK-UP PROVIDED AS PER NFPA 72	☐ YES	☐ NO
IS SURGE SUPPRESSION PROVIDED AT THE 110 VOLT AC CIRCUIT	☐ YES	☐ NO
IS THE 110 VOLT CIRCUIT PERMANENTLY LABELED "FIRE ALARM"	☐ YES	☐ NO
IS THE SYSTEM EQUIPPED WITH BACK-UP AMPLIFIERS	☐ YES	☐ NO
IS THERE MORE THAN ONE VOICE SYSTEM PANEL	☐ YES	☐ NO
IS THE VOICE MESSAGE AUDIBLE	☐ YES	☐ NO
IS THE VOICE MESSAGE APPLICABLE TO THE FACILITIES NEEDS	☐ YES	☐ NO

PANEL POWER SUPPLY, PRIMARY (MAIN) , NOMINAL VOLTAGE _____, AMPS _____

OVERCURRENT PROTECTION, TYPE _____, AMPS _____, LOCATION _____

POWER DISCONNECT MEANS _____, LOCATION _____, LOCKOUT _____

SECONDARY (STANDBY) POWER _____ STORAGE BATTERY, AMP-HOUR RATING _____

CALCULATED CAPACITY TO OPERATE SYSTEM, IN HOURS: 4 _____ 24 _____ 60 _____

BATTERY TYPE:

☐ DRY CELL ☐ NICKEL CADMIUM ☐ SEALED LEAD ACID ☐ LEAD ACID ☐ OTHER _____

TRANSIENT SUPPRESSION:

120V CIRCUIT DEVICE TYPE:	QTY.	LOCATION:
AUDIO CIRCUIT TYPE:	QTY.	LOCATION:

Additional information regarding Voice system requirements is available in the NFPA 72, Chapter 24.

VOICE CIRCUIT NUMBER	**VOICE CIRCUIT CLASS:** (A or B)	**IS CIRCUIT SUPERVISED AS REQUIRED PER NFPA 72:**	**QTY. OF DEVICES PER CIRCUIT:**	**POWER** (WATTS) **REQUIRED TO DRIVE CIRCUIT:**
# 1	_____	_____	_____	
# 2	_____	_____	_____	_____
# 3	_____	_____	_____	_____
# 4	_____	_____	_____	_____
# 5	_____	_____	_____	_____

# 6				
# 7				
# 8				
# 9				
# 10				
# 11				
# 12				
# 13				
# 14				
# 15				
# 16				
# 17				
# 18				
# 19				
# 20				
# 21				
# 22				
# 23				
# 24				
# 25				
# 26				
# 27				
# 28				
# 29				
# 30				

TOTAL POWER (IN WATTS) REQUIRED BY THE AUDIO CIRCUIT(S)		
POWER (IN WATTS) AVAILABLE AT THE VOICE PANEL FOR THE CIRCUIT(S)		
IS THE PANEL(S) SUPERVISED BY THE MAIN PANEL	☐ YES	☐ NO
IS ADEQUATE BATTERY BACK-UP PROVIDED FOR THE CIRCUITS LISTED	☐ YES	☐ NO
IS THE PANEL UL CROSS LISTED WITH THE FIRE CONTROL PANEL	☐ YES	☐ NO
IS THE PANEL EQUIPPED WITH MANUAL ZONE SELECTION SWITCHES	☐ YES	☐ NO
ARE ADDITIONAL PANELS EMPLOYED TO PROVIDE CIRCUIT POWER	☐ YES	☐ NO
ARE THE ADDITIONAL PANELS PROTECTED WITH A SYSTEM DETECTOR	☐ YES	☐ NO
ARE THE ADDITIONAL PANELS EQUIPPED WITH BATTERY BACK-UP	☐ YES	☐ NO
IS ADEQUATE BATTERY BACK-UP PROVIDED FOR THE THOSE PANELS	☐ YES	☐ NO
ADDITIONAL PANELS EQUIPPED WITH SURGE SUPPRESSION	☐ YES	☐ NO
ARE AUDIO DEVICES INSTALLED THROUGHOUT THE FACILITY *	☐ YES	☐ NO
ARE AUDIO DEVICES INSTALLED IN ONLY A PORTION OF THE FACILITY	☐ YES	☐ NO
ARE THE AUDIO DEVICES ALL POWER TAPPED THE SAME	☐ YES	☐ NO
ARE THERE ANY SPARE AUDIO CIRCUITS AVAILABLE ON THE SYSTEM	☐ YES	☐ NO

* Note Audio Devices are not to be installed in TRACON Rooms, Control Rooms, ETC.
For additional circuits fill out another page 13 of this form and attach.

NOTED AUDIO APPLIANCE AND/OR NOTIFICATION APPLIANCE CIRCUIT DEFICIENCIES AND COMMENTS:

NOTE: The comment portions of this form are required to have an entry. If a deficiency does not exist then the Technician shall enter "A deficiency has not been noted."

ADDITIONAL NOTATIONS OF THE ANNUAL FIRE SYSTEM INSPECTION AND TEST:

PART 8 ACCEPTANCE OF THE ANNUAL TEST & SIGNATURES

The Annual Inspection and Test of the above noted system(s), at the above noted FAA facility was performed as per the following: FAA ORDER, 6930.1B, Fire Prevention and Maintenance of Fire Protection Equipment, 6470.5A, Maintenance of Air Route Traffic Control Center Environmental Systems, 6480.8A, Maintenance of Airport Traffic Control Towers, 3900.19B, the Occupational Safety and Health Administration, the National Fire Protection Association, the National Fire Alarm Code, and the recommendations of the System Manufacturer. Upon completion this form shall be filed with each individual noted below and the FAA Regional Safety Office.

By Technician performing the annual test and inspection.

FAA Life Safety System Inspection & Test Report

Date:_____ Time: _____ Signature: _____

NICET Cert. #:_____ Printed Name and Title: _____

Employed by:_____ Phone Number: _____

State License or other Credentials: _____

FAA Individual whom witnessed the Fire System returned to normal operation.

Date:_____ Time: _____ Signature: _____

Printed Name and Title:_____

The individuals listed below, with their signatures, affirm that the Fire Life Safety System(s) noted above have been restored to an operational condition. If upon completion of this test an acceptable level of protection is in question, due to the deficiencies noted, then immediate action shall be taken to correct all the deficiencies. A retest of the defective device(s) or system operation(s) shall be required. Appropriate action shall be taken to insure the safety of the facilities individuals and operations during any system repairs and/or service. The responsible FAA Safety Individual shall provide the facilities Manager with Fire Watch training and information if required to insure a continued safe operation during the repairs and service.

By Technician performing the annual test and inspection.

Date:_____ Time: _____ Signature: _____

NICET Cert. #:_____ Printed Name and Title: _____

Employed by:_____ Phone Number: _____

State License or other Credentials:_____

FAA Individual whom witnessed the Fire System returned to normal operation.

Date:_____ Time: _____ Signature: _____

Printed Name and Title:_____

Authority having Jurisdiction and/or approving authority:

Name and Title: _____ Phone:_____FAX: _____

Representing: _____ Signature: _____

Local Fire Department: _____Phone: _____ FAX:_____

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FAA PRE-CONSTRUCTION AND MAINTENANCE PROJECT
SAFETY AND HEALTH CHECKLIST

Purpose

This checklist is intended to be used as a tool by RE/COTR's, designated facility POC's, or SSC managers who oversee construction and maintenance activities that potentially have Occupational Safety, Health, and Environmental (OSH/E) related impacts on AT/AF operations. This tool shall be used, as appropriate, during critical phases of construction and maintenance activities (e.g. the pre-construction meeting, 30-60 days prior to commencement of work, weekly/daily construction meetings, etc.). Emphasis should be placed on using this checklist as a tool to assess as well as reassess hazards as the project progresses. Specifically, this checklist is intended to:

- Promote sensitivity to potential OSH/E hazards associated with projects and stress the importance of not disrupting NAS operations
- Assist in identifying and validating potential project hazards and associated risks
- Assist in preventing safety and health incidents/accidents and facility shutdowns
- Ensure appropriate contractor measures and controls are in place to address potential project hazards
- Facilitate discussion with the contractor regarding plans to prevent/minimize potential incidents/accidents
- Enhance coordination between OSH/E professionals, project personnel and contractors
- Facilitate review of critical FAA OSH/E procedures with contractors
- Raise OSH/E awareness

- This checklist relies on the training and professional judgment of the user. OSH/E personnel should be consulted as needed.
- A facility POC with a thorough understanding of facility procedures and equipment considerations should participate in the site walk-through.
NOTE: For small procurements (e.g. credit card purchases) and internal FAA projects (e.g. field maintenance party projects), without specifications, immediately contact the designated OSH/E professional for assistance in completing this checklist.

1 Project Summary Information

Fill in the requested site-specific information.

Project Name, Description and Location: _____
Project/Activity/Task (detail): _____
Planned Start: _____
Expected Completion Date: _____
ANI/Contractor Contact: Name: _____ Phone: _____
OSH/E Contact: Name: _____ Phone: _____
Facility AF POC: Name: _____ Phone: _____

2 Facility Procedures

Review site specific FAA procedures and considerations with the contractor. For example, discuss when or how during the project, emergency plans will be used/required. After the procedures have been reviewed, perform a site walk-through with the contractor.

Facility Procedures	Reviewed?			Notes
	Yes	N/A	No	
Asbestos Contingency Plan	☐	☐	☐	
Critical Power Systems Awareness	☐	☐	☐	
Lock Out/Tag Out	☐	☐	☐	
Work Permits (e.g. Asbestos, Lead)	☐	☐	☐	
Emergency Plans (e.g. Occupant Emergency Plan)	☐	☐	☐	
Impacts to Fire Alarm and Suppression Systems	☐	☐	☐	
Site Walk-Through with Facility POC & Contractor(s)	☐	☐	☐	
Hazard Communications (e.g. MSDS's)	☐	☐	☐	
Other (e.g. Access/Security/Communications Equip.)	☐	☐	☐	

3 Project Hazard/Risk Analysis

Review site specific FAA procedures and considerations with the contractor. For example, discuss when or how during the project, emergency plans will be used/required. After the procedures have been reviewed, perform a site walk-through with the contractor.

Potential Project Hazards *(Consider Sensitive AT/AF Operations)*	Level of Potential Risk For Exposure/Release/Incident			Notes
	High	Low	N/A	
Hazardous Substances and Env Controls				
Asbestos (e.g. Tiles & Insulation)	☐	☐	☐	
Chemical, Gas, Fumes, Dust, Radiation	☐	☐	☐	
Indoor Air	☐	☐	☐	
Ventilation System	☐	☐	☐	
Lead-based Paint	☐	☐	☐	
Electrical Power Systems	☐	☐	☐	
Pressurized Equipment Systems	☐	☐	☐	
Work at Heights (>6 feet)	☐	☐	☐	
Other (e.g. Confined Space)	☐	☐	☐	

4 Site Safety and Health

After reviewing the potential hazards and risks in block 3, ensure that the contractor has identified measures and controls to address applicable site safety and health risks (e.g. through discussions, available site safety plans, or other applicable documents). In your judgment, if the contractor has appropriate measures to address the potential project hazards (see block 3), check the appropriate YES boxes below. If a potential project hazard has been identified in block 3 and no associated measures or controls are evident, then check the appropriate NO boxes below. If a NO box is checked, use the closeout date box to indicate when appropriate measures or controls have been incorporated into the contractor's site safety and health approach.

Program Elements	Yes	N/A	No	Closeout Date	Notes
Hazardous Substances & Environmental Controls					
Asbestos	☐	☐	☐		
Chemicals (e.g. Introduced to site) Provide MSDS	☐	☐	☐		
Gas	☐	☐	☐		
Fumes	☐	☐	☐		
Lead Paint/Other Coatings	☐	☐	☐		
Radiation and Electric Fields	☐	☐	☐		
Ventilation and Exhaust Systems	☐	☐	☐		
Electrical Power Systems	☐	☐	☐		
Procedures for Critical Power Systems Coordination	☐	☐	☐		
Provisions for GFCI	☐	☐	☐		
Control of Hazardous Energy (lockout/tagout) (e.g. electrical, mechanical, hydraulic, thermal, radiation)	☐	☐	☐		
Pressurized Equipment and Systems	☐	☐	☐		
Work at Heights (>6 feet)	☐	☐	☐		
Safe Access and Fall Protection	☐	☐	☐		
Work Platforms	☐	☐	☐		
Floor and Wall Holes and Openings	☐	☐	☐		
Personal Protective and Safety Equipment	☐	☐	☐		
Fire Prevention	☐	☐	☐		
Accident Prevention	☐	☐	☐		
Excavations (New Construction or Tie in)	☐	☐	☐		
Welding and Cutting	☐	☐	☐		
Demolition of Existing Facility in Whole or Part	☐	☐	☐		
Medical and First Aid Requirements	☐	☐	☐		
Hand and Power Tools	☐	☐	☐		
Material Handling, Storage, and Disposal	☐	☐	☐		
Rigging	☐	☐	☐		
Machinery and Mechanized Equipment (e.g. Equipment & Operator Certifications)	☐	☐	☐		
Sanitation	☐	☐	☐		
Lighting	☐	☐	☐		
Concrete & Masonry Construction & Steel Erection	☐	☐	☐		
Hazardous, Toxic, Radioactive Waste Activities	☐	☐	☐		
Other (e.g. Noise)	☐	☐	☐		

5 Review Information

The appropriate FAA point of contact and the contractor shall sign below to document discussion of the items on this form.

Reviewed By:	Date
FAA POC: See Addendum	
Contractor: See Addendum	

Incident Prevention and Hazard Control Methods Discussed? ☐ **Yes** ☐ **No**

This block indicates routing of this checklist for project coordination.

This form has been forwarded to:	Name	Date
SECM, OSH/E Contact:	See Addendum	
AF Facility Manager:	See Addendum	
AT Facility Manager:	See Addendum	
Other:	See Addendum	

Notes (e.g. provide further explanation of potential hazards, locations, etc. below and attach additional sheets if necessary.)

ANI Risk Mitigation Addendum — Communicate Your Activities

Review the project construction or installation activities with emphasis on potential risks to unscheduled interruptions with the site AF POC. Provide plans to mitigate each of those risks and to restore operations should an unscheduled interruption occur. Have the AF POC and the AF site manager sign the check sheet indicating approval of the plans and fax to the ANI platform manager for approval BEFORE beginning work. Ensure that the AF POC coordinates with air traffic to keep them aware of installation activities. ***Items marked with an asterisk require daily coordination with AF..***

Elements	Risk Yes	Risk No	Mitigation and Restoration Plan
Engineering Package			
Review of risk mitigation procedures and cut-over plans	☐	☐	
Airport Access and On-Airport Driving			
Badging	☐	☐	
Airport driver training	☐	☐	
Communication with ATCT	☐	☐	
Properly marked vehicle	☐	☐	
Access to Electrical Power			
* Essential power panels, risk of opening panel, installing conduit, manipulating wiring, etc.	☐	☐	**Site tech shall supervise any work in power panels and energize/de-energize circuits.**
* Critical power panels, risk of opening panel, installing conduit, manipulating wiring, etc.	☐	☐	**Site tech shall supervise any work in power panels and energize/de-energize circuits.**
Cable raceways	☐	☐	
Demarcs, Junction Boxes, Racks and Buried Cable			
Proper identification of cables and terminations	☐	☐	
Proximity of critical operational circuits	☐	☐	
* Coordination of digging activities	☐	☐	
Backup Systems			
Checkout of backup systems that may be required after unscheduled interruption (including diverse routes).	☐	☐	
Checkout of operational systems prior to modifications	☐	☐	
Access to Signal Cable Raceways			
Identify affected cable trays	☐	☐	
ATCT shaft	☐	☐	
* Operational consoles	☐	☐	
Removing unused cable	☐	☐	
Equipment Releases			
Schedule	☐	☐	
Coordination with AF/AT	☐	☐	
Log entries	☐	☐	**Review maint log entries ensuring purpose for release is included.**
* Removal from service	☐	☐	**Will ask site technician to remove equipment from service.**
Work Outside of Normal Duty Hours			
Schedule of activities	☐	☐	
Coordination of OPS overtime handoff if required	☐	☐	
Unscheduled Interruptions			
Restoration	☐	☐	
Return to service	☐	☐	**Site tech must return to service and make log entries.**
Notifications	☐	☐	**Site AF manager and platform manager shall be notified ASAP.**
Contractors			
Badging	☐	☐	
Oversight	☐	☐	**ANI/TSSC shall provide continuous oversight of all contractors.**
Parking	☐	☐	

AF Site POC: _____ **Date** _____

AF Site Manager: _____ **Date** _____

ANI Site POC: _____ **Date** _____

ANI Platform Manager: _____ **Date** _____

Copies provided to Site AT, AFSMO (for SECM and OSH/E contact), and ANI Operations Liaison

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U.S. Department
of Transportation
**Federal Aviation
Administration**

ATLANTA TERMINAL ENGINEERING CENTER

P.O. Box 20636
Atlanta, Georgia 30320-0631

CERTIFICATE OF SUBSTANTIAL COMPLETION (CoSC)

TO: **FEDERAL AVIATION ADMINISTRATION**

DATE OF SUBSTANTIAL COMPLETION: _____

PROJECT OR SPECIFIED PART SHALL INCLUDE: _____

PROJECT TITLE: _____

CONTRACT NO. _____

LOCATION: _____

CONTRACTOR: _____

NTP DATE: _____

The Work performed under this Contract has been inspected by authorized representatives of the FAA and Contractor and the Project (or specified part of the Project, as indicated above) is hereby declared to be substantially completed on the above date.

DEFINITION OF SUBSTANTIAL COMPLETION
The date of substantial completion of a project or specified area of a project is defined by the Contract Documents, General Conditions

A tentative list of items to be completed or corrected is appended hereto. This list may not be exhaustive, and the failure to include an item on it does not alter the responsibility of the Contractor to complete all the Work in accordance with the Contract Documents.

The Contractor accepts the above Certificate of Substantial Completion and agrees to complete and correct the items on the tentative list within the time indicated.

CONTRACTOR (Typed) _____ AUTHORIZED REPRESENTATIVE (Signature) _____ DATE _____

FAA RESIDENT ENGINEER (Typed) _____ FAA RESIDENT ENGINEER (Signature) _____ DATE _____

OWNER – FEDERAL AVIATION ADMINISTRATION
The applicable FAA AT, SSC, and SMO concurs with Substantial Completion for the purposes of maintenance and operations of the completed Work.

FAA AIR TRAFFIC REPRESENTATIVE (Typed) _____ FAA AIR TRAFFIC REPRESENTATIVE (Signature) _____ DATE _____

FAA SSC REPRESENTATIVE (Typed) _____ FAA SSC REPRESENTATIVE (Signature) _____ DATE _____

FAA SMO REPRESENTATIVE (Typed) _____ FAA SMO REPRESENTATIVE (Signature) _____ DATE _____

REMARKS:

Attached: Substantial Completion Acceptance Form (Copy)
Punchlist Dated _____
Certificate of Occupancy Dated _____ (As Required)

cc: FAA Contracting Officer
FAA Project Engineer

CERTIFICATE OF SUBSTANTIAL COMPLETION (CoSC) *(Continued)*

CONTRACT NO. _____

Concurrent with the issuance of this Certificate, the areas of responsibilities are assigned as follows:

SECURITY: _____

MAINTENANCE: _____

OPERATIONS (CLEANING/HOUSEKEEPING): _____

UTILITIES: _____

PROTECTION OF THE WORK: _____

INSURANCE: _____

HEAT: _____

COMPLETE RECORD DOCUMENTS (DATE): _____

COMPLETE O&M MANUALS (DATE): _____

DATE REQUIRED FOR COMPLETION OF CORRECTIONS TO THOSE ITEMS CONTAINED IN THE ATTACHED PUNCHLIST: _____

U.S. Department
of Transportation
**Federal Aviation
Administration**

ATLANTA TERMINAL ENGINEERING CENTER

P.O. Box 20636
Atlanta, Georgia 30320-0631

SUBSTANTIAL COMPLETION ACCEPTANCE (SCA)

(72 Hours Notice of Inspection is Required)

PROJECT: _____
(Number & Description)

PART I - NOTICE OF INSPECTION:
The Contractor has requested a substantial completion inspection for referenced project and has submitted the attached punchlist. This inspection is scheduled for:

_____ at _____
DATE TIME

All parties will meet at _____ at the above date and time. Please ensure authorized representatives from the following are present:

Contractor: _____

FAA Resident Engineer: _____

FAA Air Traffic: _____

FAA SSC: _____

FAA SMO: _____

FAA ASO-470: _____

Others: _____

PART II – SIGNATURES OF ACCEPTANCE OF SUBSTANTIAL COMPLETION:
The following parties concur referenced project, at the above date and time of inspection, is substantially complete contingent upon concurrence of the punchlist.

Contractor: _____

FAA Resident Engineer: _____

FAA Air Traffic: _____

FAA SSC: _____

FAA ASO-470: _____

Others: _____

SUBSTANTIAL COMPLETION ACCEPTANCE (SCA) *(Continued)*

PROJECT: _____
(Number & Description)

PART III - PUNCHLIST REVIEW/ACCEPTANCE:

The following parties concur the attached punchlist dated _____ is a comprehensive punchlist to the best of their knowledge and is the substantial completion punchlist.

Contractor: _____

FAA Resident Engineer: _____

FAA Air Traffic: _____

FAA SSC: _____

FAA ASO-470: _____

Others: _____

PART IV - FINAL ACCEPTANCE:

The following parties concur all punchlist items for referenced project were completed on _____.

Contractor: _____

FAA Resident Engineer: _____

FAA Air Traffic: _____

FAA SSC: _____

FAA ASO-470: _____

Others: _____

Part IV must be completed prior to processing the Contractor's final Pay Application. **The OAR is to attach proof of FAA/TnDOT final inspections, as required.**

A copy of this form is to be attached to the Certificate of Substantial Completion at the time of issuance with Parts I through III completed.

cc: FAA Contracting Officer
FAA Project Engineer

U.S. Department
of Transportation
**Federal Aviation
Administration**

ATLANTA TERMINAL ENGINEERING CENTER

P.O. Box 20636
Atlanta, Georgia 30320-0631

PARTIAL OCCUPANCY / USE AGREEMENT (POUA)

TO: **FEDERAL AVIATION ADMINISTRATION**

DATE OF PARTIAL OCCUPANCY/USE: _____

PROJECT TITLE : _____

_____

CONTRACT NO: _____

PROJECT OR SPECIFIED PART SHALL INCLUDE:

LOCATION: _____

_____

CONTRACTOR: _____

_____

_____

NTP DATE: _____

The Work performed under this Contract has been inspected by authorized representatives of the FAA and Contractor and the Project (or specified part of the Project, as indicated above) is hereby declared to be acceptable for Partial Occupancy/Use on the above date.

DEFINITION OF PARTIAL OCCUPANCY/USE

The date of Partial Occupancy/Use of a project or specified area of a project is defined by the Contract Documents, General Conditions

A tentative list of items to be completed or corrected is appended hereto. This list may not be exhaustive, and the failure to include an item on it does not alter the responsibility of the Contractor to complete all the Work in accordance with the Contract Documents.

The Contractor accepts the above Partial Occupancy/Use Agreement and agrees to complete and correct the items on the tentative list within the time indicated.

_____ _____

CONTRACTOR (Typed) AUTHORIZED REPRESENTATIVE (Signature) DATE

_____ _____

FAA RESIDENT ENGINEER (Typed) FAA RESIDENT ENGINEER (Signature) DATE

OWNER – FEDERAL AVIATION ADMINISTRATION

The applicable FAA AT, SSC, and SMO concurs with Partial Occupancy / Use for the purposes of maintenance and operations of the completed Work.

_____ _____

FAA AIR TRAFFIC REPRESENTATIVE (Typed) FAA AIR TRAFFIC REPRESENTATIVE (Signature) DATE

_____ _____

FAA SSC REPRESENTATIVE (Typed) FAA SSC REPRESENTATIVE (Signature)DATE

_____ _____

FAA SMO REPRESENTATIVE (Typed) FAA SMO REPRESENTATIVE (Signature) DATE

REMARKS: _____

Attached: Punchlist Dated _____
Certificate of Occupancy Dated _____ (As Required)

cc: FAA Contracting Officer
FAA Project Engineer

PARTIAL OCCUPANCY/USE AGREEMENT (POUA) *(Continued)*

CONTRACT NO. _____

Concurrent with the issuance of this Agreement, the areas of responsibilities are assigned as follows:

SECURITY: _____

MAINTENANCE: _____

OPERATIONS(CLEANING/HOUSEKEEPING): _____

UTILITIES: _____

PROTECTION OF THE WORK: _____

INSURANCE: _____

HEAT: _____

COMPLETE RECORD DOCUMENTS (DATE): _____
(Status)

WARRANTY STARTS (DATE): _____

COMPLETE O&M MANUALS (DATE): _____
(Status)

DATE REQUIRED FOR COMPLETION OF CORRECTIONS TO THOSE ITEMS CONTAINED IN THE ATTACHED PUNCHLIST: _____

U.S. Department
of Transportation
Federal Aviation Administration

ATLANTA TERMINAL ENGINEERING CENTER

P.O. Box 20636
Atlanta, Georgia 30320-0631

JOB MEMORANDUM (JM)

JM No.:_____ Date:_____ Sheet ___ of___ _

To: _____

Project: _____ **(B.P._____)**

Field inspection has indicated that the following work is not being performed in accordance with the Contract Documents. The Contractor is requested to provide his proposed Contractor Corrective Action (CCA) no later than _____.

Reference: Sheet No.: _____ Specification No.: _____ Other: _____
Subject: _____

Description of Discrepancy:

_____

Resident Engineer_____

CONTRACTOR'S CORRECTIVE ACTION (CCA)

CCA No.: _____ Date:_____ _____
To: **FEDERAL AVIATION ADMINISTRATION – RESIDENT ENGINEER**
The following action has been
taken_____

Contractor _____

FAA's
Response:_____

cc: FAA Contracting Officer, FAA Project Engineer, A/E

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SECTION 01 10 15 - ACRONYMS AND DEFINITIONS

PART 1 - GENERAL

1.1 ACRONYMS AND DEFINITIONS

A. When in the Special Provisions, this specification, drawings, specifications, or documents pertaining to this contract, the following terms are used; the intent and meaning shall be as specified herein.

1. AMS - Acquisition Management System
2. AMSL - Above Mean Sea Level
3. AOA - Air Operations Area
4. ARCHITECT - Architectural Engineering Firm of Record
5. ATCT - Airport Traffic Control Tower
6. CAI - Contractors Acceptance Inspection or Substantial Completion
7. CFM - Contractor-Furnished Material
8. CO - FAA Contracting Officer
9. Contr. - Contractor
10. COR/COTR - Contracting Officer's Technical Representative also referred to as Resident Engineer (RE)
11. DESIGNER - Architectural Engineering Firm of Record
12. ENGINEER - Architectural Engineering Firm of Record
13. FAA - Federal Aviation Administration (Owner)
14. FAA Field Representative – RE
15. GFE - Government-Furnished Equipment
16. GFM - Government-Furnished Material
17. GOVERNMENT - FAA
18. IAW - In Accordance With
19. MSL - Mean Sea Level
20. NEC - National Electric Code
21. NTP - Notice to Proceed
22. OSHA - Occupational Safety and Health Administration
23. Owner - FAA
24. RE - FAA Resident Engineer (Fulltime Onsite Representative of the FAA and is also referred to as the COR/COTR).
25. RWY - Runway
26. Sponsor - Airport Owner or Airport Authority
27. Substantial Completion – CAI
28. TAMR – Terminal Automation Modernization and Replacement
29. TWY - Taxiway
30. U/L or UL - Underwriters Laboratories

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 01 10 15

SECTION 01 14 00 - CONDITIONS AFFECTING WORK

PART 1 – GENERAL

1.1 WORK SCHEDULE

A. Normal working hours are 0700 to 1600, Monday through Friday (except U.S. Federal holidays). Contractor requests to work outside normal working hours require RE approval. However, the RE has full discretion to approve or disapprove, or withdraw approval of, requests. If the contractor desires to work outside normal hours (including Saturdays, Sundays, and holidays), he shall submit his written request to the RE at least 48 hours in advance. Some typical constraints on working outside normal working hours are:

1. The Contractor's request must be made at least two days in advance (e.g., request received by close of business Wednesday for work on following Saturday). Prior to submitting the request, the Contractor must coordinate as needed (such as utility outages) and have all required people and materials for the work that will be performed.
2. A Contractor with quality or safety problems (as determined by the RE) will be restricted to normal working hours.
3. A Contractor who fails to correct deficiencies within a reasonable time (as determined by the RE) will be restricted to normal working hours or may be allowed to work outside normal working hours only to correct those deficiencies.
4. The Contractor shall schedule his work to cause the least amount of interference to normal activities.

1.2 FAA OPERATIONS – (DELETED)

1.3 FACILITY OPERATIONS

A. RESTRICTIONS TO ACCESS - Access to work areas may be restricted from time to time by necessity of facility operations. Contractor acknowledges that it has taken into account and provided in its planning, scheduling and pricing for disruptions including but not limited to, restricted access to portions of the site that will not be immediately available, delivery time limitations, and moratorium dates.

B. ILLUMINATION (INTERIOR) - Contractor shall, at its expense, provide artificial light sufficient to permit work to be carried on efficiently, satisfactorily, and safely, and to permit thorough inspection. Access to the place of work shall also be clearly illuminated. All wiring for electric light and power shall be installed and maintained in a safe manner and meet all applicable codes and standards.

SECTION 2 - PRODUCTS

NOT USED

SECTION 3 - EXECUTION

NOT USED

END OF SECTION 01 14 00

SECTION 01 25 00-SUBSTITUTION PROCEDURES

PART 1 – GENERAL

1 .1 SUBSTITUTION PROCEDURE

A. Submission of request for substitution shall constitute a representation by the Contractor that he:

1. Has investigated the proposed product and determined that it is equal to or better than the specified product. Absence of an explicit comparison of any characteristic of the proposed product to the specified product shall constitute a representation that the proposed product is equal to or better than the specified product with regard to that characteristic.

2. Will provide the same warranty for the proposed product as for the specified product.

3. Will coordinate the installation and make other changes which may be required for the work to be complete in all respects, including:

a. Redesign.

b. Additional components and capacity required by other work affected by the change.

4. Waives all claims for additional costs and time extensions which subsequently may become apparent and which are caused by the change.

5. Will reimburse the Government for additional costs for evaluation of the substitution request, redesign if required, and reapproval by authorities having jurisdiction if required.

B. Substitutions will not be considered when acceptance would require substantial revision of the contract documents.

C. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals without separate written request.

D. Substitution requests will not be considered when submitted directly by subcontractor or supplier.

E. Substitution Request Procedure: Submit written request with complete data substantiating compliance of the proposed product with the requirements of the contract documents.

1. Submit request to the Resident Engineer.

2. Submit 3 copies of each request and accompanying data.

3. Submit all requests on a standard form provided.

4. Only one request for substitution will be considered for each product.

F. Data Required with Substitution Request: Provide at least the following data:

1. Identify product by specification section and paragraph number.

2. Manufacturer's name and address, trade name and model number of product (if applicable), and name of fabricator or supplier (if applicable).

3. Complete product data.

4. A list of other projects on which the proposed product has been used, with project name, and the design professional's name.

5. An itemized comparison of the proposed product to the specified product.

6. Net amount of change to the contract sum.

7. List of maintenance services and replacement materials available.

8. Statement of the effect of the substitution on the construction schedule.

9. Description of changes that will be required in other work or products if the substitute product is approved.

G. The Resident Engineer will determine acceptability of the proposed substitution.

H. When the proposed substitution is not accepted, provide the product (or one of the products, as the case may be) specified.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION 01 25 00

PRODUCT SUBSTITUTION REQUEST FORM

Note: This form to be used by General Contractor only. Requests by others will be returned with no response.

Project:
Location:_____

Government:_____

Date: _____

We hereby submit for your consideration the following substitution instead of the item specified or shown on the Drawings:

Section Number: Paragraph Specified item

_____

Proposed Substitution:

_____

_____

Attach complete product data, drawings and descriptions of products, with fabrication and installation details. Provide laboratory tests if applicable.

Provide sample, if applicable. Indicate if sample will be provided under separate cover.

Include complete information on changes to Drawings and/or Specifications that proposed substitution will require for its proper installation.

Fill in blanks below: *(Include attachments if space is insufficient. Failure to provide information will void submittal)*

A. Reason(s) for proposed substitution: *(check all that apply)*

_____ 1. Request is equivalent to product/material/assembly specified. *(Note: Attach technical documentation)*

_____ 2. Specified product or method cannot be provided within the Contract time. *(Note: This request will not be considered if the product or method cannot be provided as a result of the Contractor's failure to pursue the Work promptly, or to coordinate the various activities properly, of if the Contractor fails to place timely orders)*

_____ 3. Specified product or method cannot receive necessary approval by authority having jurisdiction, and Contractor certifies that the requested substitution can be approved. *(Note:Attach approval documentation)*

_____ 4. A substantial advantage is offered the Government, in terms of cost, time, energy conservation or other considerations of merit, after deducting redesign and evaluation costs of other work by the Government or separate contractors and similar considerations.

_____ 5. Specified product or method cannot be provided in a manner which is compatible with other materials of the Work, and the Contractor certifies that the substitution will overcome the incompatibility.

_____ 6. Specified product cannot be properly coordinated with other materials in the Work, and the Contractor certifies that the proposed substitution can be properly coordinated.
_____ 7. Specified product or method cannot receive a warranty as required by Contract Documents, and Contractor certifies that the proposed substitution can receive required warranty.

B. Does the substitution affect dimensions or details shown on Drawings:
_____ No

_____ Yes *(Note: Attach marked up prints of drawings showing changes required)*

C. What effect does the substitution have on other trades?

_____

_____

D. Compare significant qualities of proposed substitution with those of work or product originally specified or shown on drawings. Include elements such as size, weight, durability, performance, visual effect, etc.

_____

_____

E. Coordinate information. Include all changes required in other elements of the work in order to accommodate the substitution, including work performed by Government or separate contractors.

_____

_____

F. State effect substitution will have on the work schedule in comparison to the schedule which would prevail without the proposed substitution. State the effect of the proposed substitution on Contract Time.

_____

_____

G. Provide complete cost information, including a proposal of any net change in the Contract Amount.

_____

_____

H. Manufacturer's warranties of the proposed substitution and specified items are:
_____ Same

_____ Different *(Note: Explain on attachment)*

The undersigned Contractor certifies its opinion that, after thorough evaluation, the proposed substitution will result in work that in every significant respect will be equivalent to or superior to the work required by the original Contract Documents and that it will perform adequately in the application indicated. Rights to additional payment or time because of failure of the substitution to perform adequately are hereby waived.

The undersigned hereby agrees to pay in full for any changes to design, including detailing and engineering costs caused by the requested substitution.
Submitted by: *(Note: Submittal void and will be discarded if unsigned or if signed by entity other than Contractor)*

Signature: _____
(Contractor's authorized representative)

_____
(Title)

Firm Name: _____

Date: _____

For use by Resident Engineer:

_____ Accepted **_____ Accepted as Noted**

_____ Not Accepted **_____ Received too late**

By: _____ Date: _____
(Resident Engineer)

By: _____ Date: _____
(Resident Engineer)

Remarks:

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SECTION 01 31 19 - PROJECT MEETINGS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

A. Contractor participation in pre-construction conferences.

B. Contractor administration of progress meetings and pre-installation conferences.

1.2 PRE-CONSTRUCTION CONFERENCES

A. The FAA will hold a pre-construction conference.

1.3 PROGRESS MEETINGS

A. Schedule and administer Project meetings throughout progress of the work at weekly intervals as well as any called meeting.

B. Attendance: Job superintendents, major subcontractors and suppliers; and RE as appropriate to agenda topics for each meeting.

C. Agenda will include review of Work progress, status of progress schedule and adjustments thereto, delivery schedules, submittals, maintenance of quality standards, pending changes and substitutions and other items affecting progress or work.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 01 31 19

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SECTION 01 32 33 - CONSTRUCTION VIDEOS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including other Division 1 specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for construction videos.

1.3 SUBMITTALS

A. Contractors shall submit two Standard DVD videos of the construction areas and routes used for access to those areas prior to the commencement of any work. This includes areas for storage of Contractor material, equipment, and trailer. The purpose is to record any and all pre-existing conditions of the site. Shots should be obtained from several perspectives. Narrative describing the vantage point and area being photographed shall be included on the DVD. The video shall be submitted to the RE for approval prior to the commencement of construction activity.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.1 PRE-CONSTRUCTION VIDEOS

A. Before starting construction, make video of the site and work areas from different points of view as selected by the RE.

B. Make videos of existing improvements in sufficient detail to record accurately the physical conditions at the start of construction.

3.3 OWNERSHIP OF VIDEOS

A. All videos taken of the construction area are the property of the FAA and shall not be released to any source whatsoever without the prior written permission from the RE.

END OF SECTION 01 32 33

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SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Submittals listed or specified in this Contract shall conform to the provisions of this section, unless explicitly stated otherwise.

1.2 REFERENCES

NOT USED

1.3 DEFINITIONS

A. Submittal Definition: Shop drawings, product data, samples, administrative and closeout submittals, and additional data presented for review and approval. Contract clauses referring to material, workmanship specifications and drawings for construction shall apply to all submittals.

B. Types of Submittals

1. Shop Drawings. As used in this Section, drawings, schedules, diagrams, and other data prepared specifically for this contract, by the Contractor or through the Contractor by way of a subcontractor, manufacturer, supplier, distributor, or other lower tier contractor, to illustrate a portion of the work.
2. Product Data. Preprinted material such as illustrations, standard schedules, performance charts, instructions, brochures, diagrams, manufacturer's descriptive literature, catalog data, and other data to illustrate a portion of the work, but not prepared exclusively for this Contract. Information such as mix design, material characteristics, and similar data is included herein.
3. Samples. Physical examples of products, materials, equipment, assemblies, or workmanship, physically identical to a portion of the work, illustrating a portion of the work or establishing standards for evaluating the appearance of the finished work or both.
4. Administrative and Closeout Submittals. Submittals of data for which reviews and approval will be to ensure that the administrative requirements of the project are adequately met but not to ensure directly that the work is in accordance with the design concept and in compliance with the contract documents.

C. Approving Authority: Contracting Officer's Representative (COR) or Resident Engineer (RE).

D. Work: As used in this Section, the construction required by the contract documents, including labor necessary to produce the construction and materials, products, equipment, and systems incorporated or to be incorporated in such construction and including materials, products, equipment, and systems produced both on-and off-site.

1.4 SUBMITTALS

A. Submit the following in accordance with the requirements of this section.

1. Submittal status log: List each submittal. Include for each submittal the specification section number; description of item for which the submittal is required; and the Contractor's scheduled date for the submittal. Submit the log within 15 days after notice to proceed. Indicate required approval date to maintain project schedule.

1.5 PROCEDURES FOR SUBMITTALS

A. Limits and Constraints Regarding Submittals

1. Submittals shall be complete for each portion of the work; components of the work interrelated as a system shall be submitted at the same time.
2. When submittal acceptability is dependent on conditions, items, or materials included in separate subsequent submittals, the submittal will be returned without review.
3. Submittals of information not required as a submittal, or covering work for which the submittals have been returned as "No Exceptions Taken" will be returned without review.
4. Approval of a separate material, product, or component does not imply approval of assembly in which the item functions.
5. The work shall conform to approved submittals, except contractor shall conform to the contract requirements and resubmit the submittal if a previously approved submittal has an error or omission.
6. When submitting for approval material which is other than that cited in the contract, submit the necessary scale drawings, wiring and control diagrams, cuts or entire catalogs, pamphlets, descriptive literature, and performance and test data of both the material specified and the material he wishes to substitute in the number of copies of each as required under the contract.

B. Scheduling of Submittals

1. Coordinate preparation and processing of submittals with performance of the work so that work will not be delayed by submittal processing. Coordinate and sequence different categories of submittals for same work, and for interfacing units of work, so that one will not be delayed for coordination with another.
2. Except as specified otherwise, allow a review period, beginning with receipt by the approval authority, that includes at least 20 working days.

C. Substitutions: Substitutions from contract requirements require Government approval and will be considered where advantageous to the Government. Where substitutions are proposed for consideration, submit a written request, with documentation of the nature and features of the substitution and why the substitution is desirable and beneficial to the Government. The proposed substitution shall be identified separately and included along with the required submittal for the item. When a substitution is submitted for approval, the Contractor warrants the following:

1. Substitution Is Compatible: The Contract has been reviewed to establish that the substitution, when incorporated, will be compatible with other elements of the work.
2. Contractor is Responsible: The Contractor shall take action and bear the additional cost, including review costs by the Government, necessary because of the proposed substitution.

D. Resubmittal Costs: Initial submittals requiring Government approval will be reviewed at no cost to the Contractor. The cost of reviewing resubmittals, for reason of failure of the initial submittal to meet contract requirements, shall be the responsibility of the Contractor. The COR will issue a deductive contract modification to reduce the contract price by $350.00 for each resubmittal of items requiring Government review and approval. The contract completion date will not be extended due to non-compliance with submittal requirements.

E. Contractor's Responsibilities:

1. Determine and verify field measurements, materials, field construction criteria; review each submittal; and check and coordinate each submittal with requirements of the work and Contract documents.
2. Ensure that material is clearly legible. Ensure required specialty stamps are affixed and signed.
3. Stamp each sheet of each submittal with the Contractor's certificating stamp, except that data submitted in bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only. Word the submittal stamp as follows:
"I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated into Contract Number _____, is in compliance with the contract drawings and specification, can be installed in the allocated spaces, and is submitted for Government approval.
Certified by_____ Date _____"
4. Sign the Contractor's certification. The person signing the certification shall be one designated in writing by the Contractor as having that authority. The signature shall be in original ink. Stamped signatures are not acceptable.
5. Transmit submittals to the approving authority in orderly sequence, in accordance with the Submittal Status Log, and to prevent project delays and delays in work by the Government or separate contractors.
6. Advise the approving authority of substitution, as required by the paragraph entitled " Substitutions."
7. Correct and resubmit submittal as directed by the approving authority. Direct specific attention, in writing or on resubmitted submittal, to revisions not requested by the approving authority on previous submissions.
8. Retain a copy of approved submittals at the project site, including the Contractor's copy of approved samples.
9. Furnish additional copies of submittals if requested by the COR.
10. Ensure no work is begun until the submittals for that work have been returned with a review comment other than “Revise and Resubmit” or “Rejected”.

F. Approving Authority's Responsibilities:

1. Submittals will be reviewed for approval with reasonable promptness and only for conformance with project design concepts and compliance with the contract documents.

If a substitution is not identified as required by the paragraph entitled " Substitution ", then the approval of the submittal SHALL NOT be an approval of the substitution.

2. The checking, marking or approval of the shop drawings and/or product data by the COR shall not be construed as a complete check, but will indicate only that the general method of construction and detailing is satisfactory. Approval will not relieve the contractor of the responsibility for any error which may exist. The contractor shall be responsible for the dimensions and design of adequate connections, details, and satisfactory construction of all work.
3. Submittals will be returned with one of the following notations:

    a. Submittals marked "As Submitted" indicate the work may proceed as presented in the submittal.
    b. Submittals marked "Not Approved" indicate the submittal has failed to meet the specification requirements and work may not proceed.
    c. Submittals marked "As Noted" indicate there are markings in the submittal that must be included to result in an acceptable submittal. Contractor may proceed with the work by accepting and incorporating the markings in the finished work unless the "Revise and Resubmit" box is checked.
    d. Submittals marked "Revise and Resubmit" must be modified and resubmitted. The revised submittal number must indicate that it is a resubmittal of a rejected submittal.

G. The transmittal sheet returning the submittal will be initialed.

1.6 FORMAT AND QUANTITY OF SUBMITTALS

A. Transmittal Form: Transmit each submittal, except sample installations and sample panels, to the office of the approving authority. Transmit submittals with a transmittal form approved by the COR and standard for the project. The transmittal form shall identify the Contractor, indicate the date of the submittal, and include information prescribed by the transmitted form and required in the paragraph entitled "Identifying Submittals." Process transmittal forms to record actions regarding sample panels and sample installations.

B. Identifying Submittals: Identify submittals, except sample panel and sample installation, with the following information permanently adhered to or noted on each separate component of each submittal and noted on the transmittal form. Mark each copy of each submittal identically, with the following:

1. Project title and location.
2. Construction contract number.
3. The Section number and paragraph number of the Section by which the submittal is required and the paragraph to which it conforms.
4. The name, address, and telephone number of the subcontractor, supplier, manufacturer and any other second tier contractor associated with the submittal.
5. Product identification and location in project.

C. Format and Quantity for Shop Drawings

1. For shop drawings presented on sheets larger than 11-inches by 17 inches, submit two

printed copies and one Portable Document Format (PDF) file transmitted on 700 MB compact disks (CD) of each shop drawing prepared for this project.

2. For shop drawings presented on sheets 11-inches by 17 inches or less, submit two printed copies with each bound in a separate volume and a PDF file transmitted on 700 MB compact disks (CD) of each shop drawing prepared for this project.
3. Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to the information required in the paragraph entitled "Identifying Submittals."
4. Dimension drawings, except diagrams and schematic drawings; prepare dimensioned drawings to scale. Identify materials and products for work shown.
5. Shop drawings shall be not less than 8 1/2 by 11 inches or more than 36 by 42 inches.
6. After review, the approving authority will return a PDF file and a marked original.

D. Format and Quantity for Product Data

1. Submit two printed copies with each, bound in a separate volume and a PDF file transmitted on compact disk (CD) or diskette of each Product Data prepared for this project.
2. Present submittals for each Section as a complete, bound volume. Include a table of contents listing page and catalog item numbers for product data.
3. Indicate, by prominent notation, each product that is being submitted; indicate the Section and paragraph numbers to which it pertains.
4. Supplement product data with material prepared for the project to satisfy submittal requirements for which product data does not exist. Note that the material is developed specifically for the project.

E. Format and Quantity of Samples:

1. Furnish samples in the sizes below, unless otherwise specified or unless the manufacturer has prepackaged samples of approximately the same size as specified:

    a. Sample of equipment or device: Full size.
    b. Sample of materials less than 2 by 3 inches: Built up to 8 1/2 by 11 inches.
    c. Sample of materials exceeding 8 1/2 by 11 inches: Cut down to 8 1/2 by 11 inches and adequate to indicate color, texture, and material variations.
    d. Sample of linear devices or materials such as conduit and handrails: 10-inch length or length to be supplied, if less than 10 inches.
    e. Sample of non-solid materials such as sand and paint: Pint.
    f. Color selection samples: 2 inches by 4 inches.
    g. Sample panel: 4 feet by 4 feet.
    h. Sample Installation: 100 square feet.

2. Samples showing range of variation: Where variations are unavoidable due to the nature of the materials, submit sets of samples of not less than three units showing the extremes and middle of the range.

3. Quantity, unless otherwise specified:

    a. Submit two samples, or two sets of samples showing range of variation, of each required item. One approved sample or set of samples will be retained by the

approving authority and one will be returned to the Contractor.

b. Submit one sample panel. Include components listed in technical section or as directed.

c. Submit one sample installation, where directed.

4. Reusable samples: Incorporate returned samples into the work only if so specified or indicated. Incorporated samples shall be in undamaged condition at the time of use.

5. Recording of sample installation: Note and preserve the notation of the area constituting the sample installation but remove the notation at the final clean up of the project.

6. When a color, texture or pattern is specified in naming a particular manufacturer and style, include one sample of that manufacturer and style, for comparison.

7. Transmittal Form for samples shall identify manufacturer, model, type, color, etc. sufficient to reorder or replace.

F. Format and Quantity of Administrative and Closeout Submittals

1. Unless otherwise specified, submit administrative and closeout submittals in the format and quantities required for shop drawings.
2. Comply with section entitled "Contract Closeout Procedures".

G. A Portable Document Format (PDF) file for each shop drawing, product data, and sample transmittals shall be uploaded to FAA's KSN website.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 01 33 00

SECTION 01 40 00 - CONTRACTOR QUALITY CONTROL

PART 1 - GENERAL

1.1 REFERENCES

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

1.2 AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

A. ASTM D 3740 Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

B. ASTM E 329 Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.3 SUBMITTALS

A. Contractor Quality Control Plan

B. Contractor Quality Control Personnel

C. Daily Logs

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.1 GENERAL REQUIREMENTS

A. The Contractor is responsible for quality control and shall establish and maintain an effective quality control system. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product that complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the RE for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the RE, and shall be responsible for all construction and construction related activities at the site. Similar requirements apply to the quality control manager.

3.2 CONTRACTOR QUALITY CONTROL (CQC) PLAN

A. Content of the CQC Plan

1. The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:
2. A description of the quality control organization, including a chart showing lines of authority.
3. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
4. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.
5. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01 33 00, "SUBMITTAL PROCEDURES".
6. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities must be approved by the RE.)
7. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
8. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.
9. Reporting procedures, including proposed reporting formats.
10. A list of the definable features of work. A definable feature of work is a task that is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there is frequently more than one definable feature under a particular section. This list will be agreed upon during the coordination meeting.

B. Acceptance of Plan: Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

C. Notification of Changes: After acceptance of the CQC Plan, the Contractor shall notify the RE in writing of any proposed change. Proposed changes are subject to acceptance by the RE.

3.3 COORDINATION MEETING

A. After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the RE and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 7 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the FAA's Quality Assurance. Minutes of the meeting will be prepared by the Contractor and signed by both the Contractor and the RE. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures that may require corrective action by the Contractor.

END OF SECTION 01 40 00

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SECTION 01 52 16 - SAFETY REQUIREMENTS

PART 1 - GENERAL

1.1 REFERENCES

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

a.	ANSI A10.14	Construction and Demolition Operations – Requirements for Safety Belts, Harnesses, Lanyards and Lifelines for Construction and Demolition Use
b.	ANSI Z359.1	Safety Requirements for Personal Fall Arrest Systems

2. CODE OF FEDERAL REGULATIONS (CFR)

a.	29 CFR 1910	General Industry
b.	29 CFR 1910.94	Ventilation
c.	29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
d.	29 CFR 1926	Construction
e.	29 CFR 1926.65	Hazardous Waste Operations and Emergency Response
f.	29 CFR 1926.502(f)	Warning Line Systems
g.	29 CFR 1926.1200	Hazard Communication Standard (MSDS)

3. CORPS OF ENGINEERS (COE)

a.	COE EM-385-1-1	Safety and Health Requirements Manual

4. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

a.	NFPA 70	National Electrical Code
b.	NFPA 241	Safeguarding Construction, Alteration, and Demolition Operations. Typical items of inclusion include, but are not limited to: Fire Safety Program, Contractor Requirements, Fire Alarm Reporting, Fire Department Access, Hydrants, Standpipes, Fire Extinguishers and Means of Egress.

1.2 DEFINITIONS

A. Certified Safety Professional. A safety manager, safety specialist, or safety engineer that has passed the CSP exam administered by the Board of Certified Safety Professionals.

B. Confined Space. A space which by design has limited openings for entry and exit, unfavorable natural ventilation which could contain or produce dangerous air contaminants, and which is not

intended for continuous employee occupancy, engulfment or any other recognized safety or health hazard. Confined spaces include, but are not limited to storage tanks, process vessels, pits, silos, vats, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, sewers, tunnels, underground utility vaults, and pipelines.

C. Multi-employer work site (MEWS). The prime contractor is the "controlling authority" for all work site safety and health of the subcontractors.

D. Recordable Occupational Injuries or Illness. An occupational injury or illnesses which result in serious injuries, lost workday cases, non-fatal cases or significant mishaps.

E. Serious Injuries & Fatalities. Regardless of the time between the injury and death or the length of the illness; hospitalization of three or more employees; or property damage in excess of $200,000.

F. Lost Workday Cases. Injuries, other than fatalities, that result in lost workdays.

G. Non-Fatal Cases. Cases without lost workdays which result in transfer to another job or termination of employment, or require medical treatment (other than first aid) or involve property damage in excess of $10,000 but less than $200,000 or involve: loss of consciousness or restriction of work or motion. This category also includes any diagnosed occupational illnesses which are reported to the employer but are not classified as facilities or lost workday cases.

H. Safety Officer. The superintendent or other qualified or competent person who is responsible for the on-site safety required for the project. The contractor quality control person cannot be the safety officer, even though the QC has safety inspection responsibilities as part of the QC duties.

I. Significant Contractor Mishap. A contractor mishap which involves falls of 4 feet or more, electrical mishaps, confined space mishaps, diving mishaps, equipment mishaps, and fire mishaps which result in a lost time injury, or property damage of $10,000 or more, but less than $200,000; or when fire department or emergency medical treatment (EMT) assistance is required.

J. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment provided by a physician or registered personnel.

K. First aid. An on-time treatment, and follow-up visit for the purpose of observation, of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care, even though provided by a physician or registered professional personnel.

L. Lost Workdays. The number of days (consecutive or not) after, but not including, the day of injury or illness during which the employee would have worked but could not do so; that is, could not perform all or part of his normal assignment during all or any part of the workday or shift; because of the occupational injury or illness.

1.3 SUBMITTALS

A. Statements

1. Accident Prevention Plan (APP): Submit at least 30 calendar days prior to start of work at the job site, follow Appendix A of COE EM-385-1-1, make APP site specific.
2. Activity Hazard Analysis (AHA): Submit the AHA for the preparatory phase as a part of the APP. Submit subsequent AHA for each major phase of work at least 30 calendar days prior to the start of that phase. Format subsequent AHA as amendments to the APP.

B. Records

1. Daily Confined Space Entry Permit. Submit one copy of each permit attached to each Daily Production Report.
2. Reports. Submit reports as their incidence occurs, in accordance with the requirements of the paragraph entitled, "Reports".

1.4 QUALITY ASSURANCE

A. Qualifications

1. Qualifications of Safety Officer:

   a. Ability to manage the on-site contractor safety program through appropriate management controls.
   b. Ability to identify hazards and have the capability to expend resources necessary to abate the hazards.
   c. Must have worked on similar types of projects that are equal to or exceed the scope of the project assigned with the same responsibilities.

2. Qualifications of Qualified Person, Confined Space Entry. The qualified person shall be capable (by education and specialized training) of anticipating, recognizing, and evaluating employee exposure to hazardous substances or other unsafe conditions in a necessary control and protective action to ensure worker safety.

B. Meetings

1. Preconstruction Conference: The safety officer shall attend the preconstruction conference to discuss work procedures and safety.
2. Weekly Safety Meetings: Hold weekly. Provide minutes showing contract title, signatures of attendees and a list of topics discussed.

1.5 ACCIDENT PREVENTION PLAN (APP)

A. Prepare the APP in accordance with the required and advisory provisions of COE EM-385-1-1 including appendix A, "Minimum Basic Outline for Preparation of Accident Prevention Plan," and as modified herein. Include the associated AHA and other specific plans, programs and procedures listed on Pages A-3 and A-4 of COE EM-385-1-1, some of which are called out below.

B. Contents of the Accident Prevention Plan:

1. Name and safety related qualifications of safety officer (including training and any certifications).
2. Qualifications of competent and of qualified persons.
3. Identify the individual who will complete exposure data (hours worked); accident investigations, reports and logs; and immediate notification of accidents to include subcontractors.
4. Emergency response plan. Conform to COE EM-385-1-1, paragraph 01.E and include a map denoting the route to the nearest emergency care facility with emergency phone numbers. Contractor may be required to demonstrate emergency response.
5. Confined Space Entry Plan. Identify the qualified person's name and qualifications, training, and experience. Delineate the qualified person's authority to direct work stoppage in the event of hazardous conditions. Include procedure for rescue by contractor personnel and the coordination with emergency responders. (If there is no confined space work, include a statement that no confined space work exists and none will be created.)
6. Hazardous Material Use. Provisions to deal with hazardous materials, pursuant to the Contract Clause "FAR 52.223-3, Hazardous Material Identification and Material Safety Data." And the following:

    a. Inventory of hazardous materials to be introduced to the site with estimated quantities.
    b. Plan for protecting personnel and property during the transport, storage and use of the materials.
    c. Emergency procedures for spill response and disposal, including a site map with approximate quantities on site at any given time. The site map will be attached to the inventory, showing where the hazardous substances are stored.
    d. Material Safety Data Sheets for inventoried materials not required in other section of this specification.
    e. Labeling system to identify contents on all containers on-site.
    f. Plan for communicating high health hazards to employees and adjacent occupants.

7. Hazardous Energy Control Plan. For hazardous energy sources, comply with COE EM-385-1-1, paragraph 12.A.07.
8. Critical Lift Procedures. Weight handling critical lift plans will be prepared and signed in accordance with COE EM-385-1-1, paragraph 16.c.18.
9. Alcohol and Drug Abuse Plan

    a. Describe plan for testing with pre-employment screening in accordance with the DFAR Clause subpart 252.223-7004, "Drug Free Work Force".
    b. Description of the on-site prevention program.

10. Fall Protection Plan. The plan shall be site specific and protect all workers at elevations above 6 feet.
11. Silica Exposure Reduction. The plan shall include specific procedures to prevent employee silica inhalation exposures.

1.6 ACTIVITY HAZARD ANALYSIS (AHA)

A. Prepare for each phase of the work. As a minimum, define activity being performed, sequence of work, specific hazards anticipated, control measures to eliminate or reduce each hazard to acceptable levels, training requirements for all involved, and the competent person in charge of that phase of work. For work with fall hazards, including fall hazards associated with scaffold erection and removal, identify the appropriate fall arrest systems. For work with materials handling equipment, address safeguarding measures related to materials handling equipment. For work requiring excavations, include excavation safeguarding requirements. The appropriate AHA shall be reviewed and attendance documented by Contractor at the preparatory, initial, and follow-up phases of Quality Control inspection.

1.7 DRUG PREVENTION PROGRAM

A. Conduct a proactive drug and alcohol use prevention program for all workers, prime and subcontractor, on the site. Ensure that no employees either use illegal drugs or consume alcohol during work hours. Ensure no employees under the influence of drugs or alcohol during work hours. After accidents, collect blood, urine or saliva specimens and test injured employee influence. A copy of the test shall be made available to the RE upon request.

1.8 FALL HAZARD PREVENTION PROGRAM (DELETED)

1.9 DUTIES OF THE SAFETY OFFICER

A. Ensure construction hazards are identified and corrected.

B. Maintain applicable safety reference material on the job site.

C. Maintain a log of safety inspections performed.

D. Attend the pre-construction conference.

E. Generate and approve agenda for safety meetings.

1.10 DISPLAY OF SAFETY INFORMATION

A. Display the following information in clear view of the on-site construction personnel:

1. Map denoting the route to the nearest emergency care facility with emergency phone numbers.
2. AHA
3. Confined space entry permit.

1.11 SITE SAFETY REFERENCE MATERIALS

A. Maintain safety-related references applicable to the project, including those listed in the article "References". Maintain applicable equipment manufacturers' manuals.

1.12 HIGH HAZARD WORK AND LONG DURATION

A. Work under this contract is potentially hazardous. Pursuant to contract clause "FAR 52.236-13, Accident Prevention, Alternate I," submit in writing additional proposals for effecting accident prevention under hazardous conditions. Meet in conference with RE to discuss and develop mutual understanding relative to the administration of the overall safety program.

1.13 EMERGENCY MEDICAL TREATMENT

A. Contractors shall arrange for their own emergency medical treatment. FAA has no responsibility to provide.

1.14 REPORTS

A. Reporting Reports: For OSHA recordable accidents, the prime contractor will conduct a suitable investigation, complete the Contractor Significant Incident Report (CSIR) form and provide to the RE within 5 calendar days of the accident.

B. Notification: Notify RE, within 4 hours, of any accident meeting the definition of OSHA recordable occupational injury or illness. Information shall include Contractor name; contract title; type of contract; name of activity, installation or location where mishap occurred; date and time of mishap; names of personnel injured; extent of property damage, if any; and brief description of mishap (to include type of construction equipment used, participants, etc). In addition to OSHA reporting requirements, initial notification shall be made of any accident involving significant mishaps.

C. Monthly Exposure Report: Monthly exposure reporting, to the RE is required to be attached to the monthly billing request. This report is a compilation of employee-hours worked each month for all site workers, both prime and subcontractor.

D. OSHA Citations and Violations: Provide the RE with a copy of each OSHA citation, OSHA report and Contractor response. Correct violations and citations promptly and provide written corrective actions to the RE.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.1 CONSTRUCTION

A. Comply with COE EM-385-1-1, NFPA 241, the accident prevention plan, the activity hazard analysis and other related submittals and activity fire and safety regulations.

B. Hazardous Material Exclusions: Not withstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing

radiation as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocynates, lead-based paint are prohibited. Exceptions to the use of any of the above excluded materials may be considered by RE upon written request by Contractor.

C. Unforeseen Hazardous Material: If material that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the RE immediately. Within 14 calendar days the RE will determine if the material is hazardous. If material is not hazardous or poses no danger, the RE will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the RE will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions".

3.2 PRE-OUTAGE COORDINATION MEETING

A. Contractors are required to apply for utility outages a minimum of 15 days in advance. As a minimum, the request should include the location of the outage, utilities being effected, duration of outage and any necessary sketches. Once approved and prior to beginning work on the utility system requiring shut down, the Contractor shall attend a pre-outage coordination meeting with the RE to review the scope of work and the lock out/tag out procedures for work protection.

3.3 PERSONNEL PROTECTION

A. Conduct of Electrical Work: Underground electrical spaces must be certified safe for entry before entering to conduct work. Cable intended to be cut must be positively identified and de-energized prior to performing each cut. Perform all high voltage cutting remotely. When racking in or live switching of circuit breakers, no additional person other than the switch operator will be allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method. When working in energized substations, only qualified electrical workers shall be permitted to enter. When work requires Contractor to work near energized circuits as defined by the NFPA 70, high voltage personnel must use personnel protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves with leather protective sleeves, fire retarding shirts, coveralls, face shields, and safety glasses. Insulating blankets, hearing protection, and switching suits may be required, depending on the specific job and as delineated in the Contractor AHA.

3.4 ACCIDENT SCENE PRESERVATION

A. For serious accidents, ensure the accident site is secured and evidence is protected remaining undisturbed until released by the RE. After release is issued, promptly replace used, damaged, or worn equipment.

END OF SECTION 01 52 16

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SECTION 01 58 13 - POSTING OF NOTICES

PART 1 - GENERAL

1.1 SCHEDULE OF WAGE RATES AND BENEFITS

A. The Contractor, and each subcontractor under him, shall post in a conspicuous place on the site (1) the schedule of the specified overall hourly rate for each applicable classification; (2) the amount of liquidated damages for any failure to pay such rates; and (3) the name and address of the responsible official in County or the U.S. Department of Labor (whichever is applicable) to whom complaints should be given.

B. Copy of this Notice will be provided to the Contractor by the FAA.

1.2 NON-DISCRIMINATION CLAUSE

A. In accordance with AMS Clause No. 3.6.2-9 Equal Opportunity, the Contractor shall post the non-discrimination clause as required by Executive Order 11246.

B. The following is a statement of the required clause: Equal Employment Opportunity is the Law--Discrimination is Prohibited by the Civil Rights Act of 1964 and by Executive Order No. 11246. Title VII of the Civil Rights Act of 1964--Administered by: The Equal Employment Opportunity Commission. Prohibits discrimination because of Race, Color, Religion, Sex, or National Origin by Employers with 25 or more employees, by Labor Organizations with a hiring hall of 25 or more members, by Employment Agencies, and by Joint Labor-Management Committees for Apprenticeship or Training. Any person who believes he or she has been discriminated against should contact: The Equal Employment Opportunity Commission. 2401 E Street, NW, Washington, DC 20506.

C. EXECUTIVE ORDER NO. 11246--Administered by: The Office of Federal Contract Compliance Programs prohibits discrimination because of Race, Color, Religion, Sex, or National Origin, and requires affirmative action to ensure equality of opportunity in all aspects of employment by all Federal Government Contractors and Subcontractors, and by Contractors Performing Work Under a Federal Assisted Construction Contract, regardless of the number of employees in either case. Any person who believes he or she has been discriminated against should contact: The Office of Federal Contract Compliance Programs, U.S. Department of Labor, Washington, DC 20210.

PART 2 - PRODUCTS
NOT USED

PART 3 - EXECUTION
NOT USED

END OF SECTION 01 58 13

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SECTION 01 71 33 - PROTECTION OF WORK AND PROPERTY

PART 1 - GENERAL

1.1 REQUIREMENT INCLUDED

A. Protection of products after installation.

B. Protection of existing property and facilities.

PART 2 - PRODUCT

NOT USED

PART 3 - EXECUTION

3.1 PROTECTION AFTER INSTALLATION

A. Protect installed products and control traffic in immediate area to prevent damage from subsequent operations.

B. Provide protective coverings at walls, projections, corners and jambs, sills and soffits of openings in and adjacent to traffic areas.

C. Cover walls and floors of elevator cabs and jambs of cab doors with 3/4 inch plywood, when elevators are used by construction personnel.

D. Protect finished floors and stairs from dirt, wear and damage:

1. Secure heavy sheet goods or similar protective materials in place, in areas subject to foot traffic.
2. Lay planking or similar rigid materials in place, in areas subject to movement of heavy objects.
3. Lay planking or similar rigid materials in place, in areas where storage of products will occur.

E. Protect waterproofed and roofed surfaces:

1. Restrict use of surfaces from traffic of any kind and from storage of products.
2. When an activity is mandatory, obtain recommendations for protection of surfaces from manufacturer. Install protection and remove on completion of activity. Restrict use of adjacent unprotected areas.

F. Restrict traffic of any kind across planted lawn and landscape areas.

3.2 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

A. The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property markers until the RE has witnessed or otherwise referenced their location and shall not move them until directed.

B. The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in its manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the work is completed and accepted.

C. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the nonexecution thereof by the Contractor, the Contractor shall restore, at its own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, or otherwise restoring as may be directed, or it shall make good such damage or injury in an acceptable manner, at no additional cost to the government.

END OF SECTION 01 71 33

SECTION 01 74 13 - CONSTRUCTION CLEANING

PART 1 - GENERAL

1.1 REQUIREMENT INCLUDED

A. Cleaning and disposal of waste materials, debris and rubbish during construction.

PART 2 - PRODUCTS

2.1 EQUIPMENT

A. Provide covered containers for deposit of waste materials, debris and rubbish.

PART 3 - EXECUTION

3.1 CLEANING

A. Maintain areas under Contractor's control free of waste materials, scraps, surplus material, debris and rubbish. Maintain site in a clean and orderly condition.

B. Remove debris and rubbish from pipe chases, plenums attics, crawl spaces and other closed or remote spaces, prior to closing the space.

C. Clean interior areas daily to provide suitable conditions for work and to prevent fire or accidents.

D. Use power brooms to clean paved areas as needed and immediately prior to opening any paved area to aircraft or vehicular traffic.

E. All combustible waste materials shall be removed from buildings at the end of each working day.

F. Broom clean interior areas prior to start of surface finishing and continue cleaning on a daily basis.

G. Control cleaning operations so that dust and other particulates will not adhere to wet or newly-coated surfaces.

H. Responsibility for construction cleaning shall not be delegated to subcontractors performing construction work under this Contract.

3.2 DISPOSAL

A. Remove waste materials, debris and rubbish from site bi-weekly and legally dispose of off-site in an authorized disposal area.

3.3 CONTRACTOR'S FAILURE TO CLEAN

A. If the Contractor fails to maintain levels of cleanliness in work areas, satisfactory to the RE, then the FAA shall have the right to cause such areas to be cleaned by others. The costs to the FAA for such cleaning, plus 25% for administration, shall be the obligation of the Contractor and shall be deducted from any money due the Contractor hereunder.

END OF SECTION 01 74 13

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Compliance with Specification 01 77 10-Final Cleaning
2. Compliance with Specification 01 78 23-Operation and Maintenance Data
3. Compliance with Specification 01 78 36-Warranties and Guarantees
4. Compliance with Specification 01 78 39-Project Record Documents
5. Completion of Asbestos and Lead Free Certification as per Division 1
6. Completion of Lock Out/Tag Out (LOTO) Procedures as per Division 26
7. Final Punch List

1.2 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.

1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
2. Advise FAA of pending insurance changeover requirements.
3. Obtain and submit releases permitting FAA unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
4. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
5. Deliver tools, spare parts, extra materials, and similar items to location designated by FAA. Label with manufacturer's name and model number where applicable.
6. Make final changeover of permanent locks and deliver keys to FAA. Advise FAA's personnel of changeover in security provisions.
7. Complete startup testing of systems.
8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
9. Advise FAA of changeover in utilities.
10. Submit changeover information related to FAA's occupancy, use, operation, and maintenance.
11. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

B. Inspection: Submit a written request for inspection for Substantial Completion, also referred to as the Contractor Acceptance Inspection (CAI). On receipt of request, COTR will either schedule the inspection within 14 days or notify Contractor of unfulfilled requirements. COTR

will prepare the Certificate of Substantial Completion after the inspection or will notify Contractor of items, either on Contractor's list or additional items identified by COTR, that must be completed or corrected before certificate will be issued. COTR will also provide a punch list that will form the basis of requirements for the Final Completion.

1.3 FINAL COMPLETION

A. Preliminary Procedures: Contractor should request final inspection prior to contract completion date. Before requesting final inspection for determining date of Final Completion, complete the following:

1. Submit a Final Application for Payment.
2. Submit certified copy of COTR's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by COTR. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
4. Perform a final cleaning in accordance with Section 01 74 23 "FINAL CLEANING".

B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, COTR will either proceed with inspection or notify Contractor of unfulfilled requirements. COTR will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1.4 WARRANTIES

A. Submit warranties in accordance with Section 01 78 36 "WARRANTIES AND GUARANTEES". Warranty period shall begin on date of Substantial Completion as listed in Certificate of Substantial Completion.

B. Partial Occupancy: Submit properly executed warranties within fifteen (15) days of completion of designated portions of the Work that are completed and occupied or used by FAA during construction period by separate agreement with Contractor.

C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 01 77 00

SECTION 01 77 10 - FINAL CLEANING

PART 1 - GENERAL

1.1 REQUIREMENT INCLUDED

A. Final cleaning of project.

1.2 SUMMARY

A. This section includes administrative and procedural requirements, protections of construction in progress, and for final cleaning at Substantial Completion.

B. Environmental Requirements: Conduct cleaning and waste-disposal operations in compliance with local laws and ordinances. Comply fully with federal and local environmental and antipollution regulations.

C. Do not dispose of volatile wastes, such as mineral spirits, oil, or paint thinner, in storm or sanitary drains.

D. Burning or burying of debris, rubbish, or other waste material on the premises is not permitted.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by the manufacturer or fabricator of the material to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Provide final-cleaning operations. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit of work to the condition expected from a commercial building cleaning and maintenance program. Comply with manufacturer's instructions.

B. Cleaning Operations: Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for the entire Project or a portion of the Project.

1. Clean the Project Site, yard and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and foreign substances.

2. Sweep paved areas broom clean. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
3. Broom and mop clean concrete floors in unoccupied spaces.
4. Remove petrochemical spills, stains, and other foreign deposits.
5. Remove tools, construction equipment, machinery, and surplus material from the site.
6. Vacuum clean carpet and similar soft surfaces, removing debris and excess nap. Shampoo, if required.
7. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
8. Remove marks, stains, fingerprints, and other soils or other dirt from painted, decorated, and natural finished woodwork and other work.
9. Clean cabinet work removing stains, paint, dirt and dust.
10. Remove spots, plaster, soil and paint from ceramic tile, marble, and other finished materials, and wash or wipe clean.
11. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
12. Clean flooring materials thoroughly, including stripping, buffing and waxing. Comply with materials manufacturer's instructions and recommendations.
13. Remove labels that are not permanent labels.
14. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
15. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
16. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs and defective and noisy starters in fluorescent and mercury vapor fixtures.
17. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
18. Leave the Project clean and ready for occupancy.

C. Removal of Protection: Remove temporary protection and facilities installed during construction to protect previously completed installations during the remainder of the construction period.

D. Compliances: Comply with governing regulations and safety standards for cleaning operations. Remove waste materials from the site and dispose of lawfully.

1. Where extra materials of value remain after completion of associated work, they become the FAA's property. Dispose of these materials as directed by the FAA.
2. The Contractor shall not dispose of debris or waste materials on the FAA's property without the prior written approval of the FAA.

END OF SECTION 01 77 10

SECTION 01 78 23 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

A. Preparation and submittal of operation and maintenance data.
B. All submittals shall be bound in commercial quality 8.5 x 11 three ring binders, with cleanable plastic covers.

1.2 REFERENCES

A. The current issues of the publication listed below forms a part of this specification to the extent referenced. The publication is referred to in the text by the basic designation only.

B. DEFENSE LOGISTICS AGENCY (DLA)

1. DLA H 4-1 Federal Supply Code for Manufacturers (FSCM); United States and Canada - Name to Code, June 1982

1.3 SUBMISSION OF OPERATION AND MAINTENANCE DATA

A. Submit operation and maintenance (O&M) data which is specifically applicable to this contract and a complete and concise depiction of the provided equipment or product. All data shall be site specific. Data containing extraneous information to be sorted through to find applicable instructions will not be accepted. Present information in sufficient detail to clearly explain user O&M requirements at the system, equipment, component, and subassembly level. Include an index preceding each submittal. Submit in accordance with Section 01 33 00, "SUBMITTAL PROCEDURES."

B. Quantity: Submit five copies of the manufacturers' information specified herein for the components, assemblies, subassemblies, attachments, and accessories. The items for which O&M data is required are listed in the technical sections which specify that particular item.

Provide Portable Document Format (PDF) file on 700+ MB compact disk or other approved portable electronic media for each manual. PDF file shall contain Table of Contents and Bookmarks to match manual. PDF shall also be uploaded to FAA's KSN website.

C. Package Content and Format: For each product, system, or piece of equipment requiring submission of O&M data, submit the package required in the individual technical section. Labels shall be on paper in color(s) specified with black print, and shall clearly denote the following:

FEDERAL AVIATION ADMINISTRATION
ATLANTA TRACON – A80
(Manual Title)
(Date)

D. Package content shall be as required in the paragraph entitled "Schedule of Operations and Maintenance Data Packages," with the following general requirements:

1. First page shall be a Cover Page, identifying:

FEDERAL AVIATION ADMINISTRATION
ATLANTA TRACON - A80
(Manual Title)
(Date)

2. Second page shall be a Table of Contents indicating the contents of the binder(s).
3. The third page shall list the Names, Addresses, Contracts, and Phone Numbers for the following:

   a. FAA Project Engineer
   b. Designer(s)
   c. General Contractor
   d. Subcontractors
   e. Sub-subcontractors
   f. Suppliers

4. The remaining portions of the manual shall be separated by each major division of work as identified by the Contract Documents.

   a. PROJECT INFORMATION
   b. Within each major division of work, each section shall be individually identified by a typed index/tab. For each specification requirement, submit the following information in the order outlined below:

      1) Test Reports
      2) Operating and Maintenance Instructions, including but not limited to:

         a) Manufacturer's Recommended Care and Cleaning
         b) Installation Instructions
         c) Parts Lists
         d) Lubrication Checklists
         e) Equipment Supplier Lists
         f) Special Instructions
         g) Preventive Maintenance Instructions.

5. Service and Maintenance Contracts: Include Name, address and phone number and contact of Manufacturer's authorized Repair Company.

6. Completed FAA Turnover Forms:

   a. See 3.1 for list of forms.

7. Copies of electrical panel schedules and directories.

E. Changes to Submittals: Manufacturer-originated changes or revisions to submitted data shall be furnished by the Contractor if a component of an item is so affected subsequent to acceptance of the O&M data. Changes, additions, or revisions required by the Contracting Officer for final acceptance of submitted data, shall be submitted by the Contractor within 30 calendar days of the notification of this change requirement.

1.4 TYPES OF INFORMATION REQUIRED IN O&M DATA PACKAGES

A. Operating Instructions: Include specific instructions, procedures, and illustrations for the following phases of operation:

1. Safety Precautions: List personnel hazards and equipment or product safety precautions for all operating conditions.
2. Operator Prestart: Include requirements to set up and prepare each system for use.
3. Startup, Shutdown, and Post shutdown Procedures: Include a control sequence for each of these operations.
4. Normal Operations: Include control diagrams with data to explain operation and control of systems and specific equipment.
5. Emergency Operations: Include emergency procedures for equipment malfunctions to permit a short period of continued operation or to shut down the equipment to prevent further damage to systems and equipment. Include emergency shutdown instructions for fire, explosion, spills, or other foreseeable contingencies. Provide guidance on emergency operations of all utility systems including valve locations and portions of systems controlled.
6. Operator Service Requirements: Include instructions for services to be performed by the operator such as lubrication, adjustments, and inspection.
7. Environmental Conditions: Include a list of environmental conditions (temperature, humidity, and other relevant data) which are best suited for each product or piece of equipment and describe conditions under which equipment should not be allowed to run.

B. Preventive Maintenance: Include the following information for preventive and scheduled maintenance to minimize corrective maintenance and repair.

1. Lubrication Data: Include lubrication data, other than instructions for lubrication in accordance with paragraph entitled "Operator Service Requirements":

   a. A table showing recommended lubricants for specific temperature ranges and applications;
   b. Charts with a schematic diagram of the equipment showing lubrication points, recommended types and grades of lubricants, and capacities; and
   c. A lubrication schedule showing service interval frequency.

2. Preventive Maintenance Plan and Schedule: Include manufacturer's schedule for routine preventive maintenance, inspections, tests and adjustments required to ensure proper and economical operation and to minimize corrective maintenance and repair. Provide manufacturer's projection of preventive maintenance man-hours on a daily, weekly, monthly, and annual basis including craft requirements by type of craft.

C. Corrective Maintenance: Include manufacturer's recommendations on procedures and instructions for correcting problems and making repairs.

1. Troubleshooting Guides and Diagnostic Techniques: Include step-by-step procedures to promptly isolate the cause of typical malfunctions. Describe clearly why the checkout is performed and what conditions are to be sought. Identify tests or inspections and test equipment required to determine whether parts and equipment may be reused or require replacement.
2. Wiring Diagrams and Control Diagrams: Wiring diagrams and control diagrams shall be point-to-point drawings of wiring and control circuits including factory-field interfaces. Provide a complete and accurate depiction of the actual job specific wiring and control work. On diagrams number electrical and electronic wiring and pneumatic control tubing and the terminals for each type, identically to actual installation numbering.
3. Maintenance and Repair Procedures: Include instructions and list tools required to restore product or equipment to proper condition or operating standards.
4. Removal and Replacement Instructions: Include step-by-step procedures and list required tools and supplies for removal, replacement, disassembly, and assembly of components, assemblies, subassemblies, accessories, and attachments. Provide tolerances, dimensions, settings and adjustments required. Instructions shall include a combination of text and illustrations.
5. Spare Parts and Supply Lists: Include lists of spare parts and supplies required for maintenance and repair to ensure continued service or operation without unreasonable delays. Special consideration is required for facilities at remote locations. List spare parts and supplies that have a long lead time to obtain.
6. Corrective Maintenance Man-Hours: Include manufacturer's projection of corrective maintenance man-hours including craft requirements by type of craft. Corrective maintenance that requires participation of the equipment manufacturer shall be identified and tabulated separately.

D. Appendices: Provide information required below and information not specified in the preceding paragraphs but pertinent to the maintenance or operation of the product or equipment. Include the following:

1. Parts Identification: Provide identification and coverage for all parts of each component, assembly, subassembly, and accessory of the end items subject to replacement. Include special hardware requirements, such as requirement to use high-strength bolts and nuts. Identify parts by make, model, serial number, and source of supply to allow reordering without further identification. Provide clear and legible illustrations, drawings, and exploded views to enable easy identification of the items. When illustrations omit the part numbers and description, both the illustrations and separate listing shall show the index, reference, or key number which will cross-reference the illustrated part to the listed part. Parts shown in the listings shall be grouped by components, assemblies, and subassemblies.

    a. Manufacturer's standard commercial practice: The parts data may cover more than one model or series of equipment, components, assemblies, subassemblies, attachments, or accessories, such as a master parts catalog, in accordance with the manufacturer's standard commercial practice.
    b. Other than manufacturer's standard commercial practice: End item manufacturer

may add a cross-reference to implement components' assemblies and parts requirements when implementation in manual form varies significantly from the style, format, and method of manufacturer's standard commercial practice. Use the format in the following example:

End Item Manufacturer's -Alphanumeric Sequence-	-	Actual Manufacturer's Name and FSCM-	-	Actual Manufacturer Part No.-
100001		John Doe & Co.		00000 2000002

c. List FSCM in accordance with DLA H 4-1.

2. Warranty Information: List and explain the various warranties and include the servicing and technical precautions prescribed by the manufacturers or contract documents to keep warranties in force.
3. Personnel Training Requirements: Provide information available from the manufacturers to use in training designated personnel to operate and maintain the equipment and systems properly.
4. Testing Equipment and Special Tool Information: Include information on test equipment required to perform specified tests and on special tools needed for the operation, maintenance, and repair of components.
5. Contractor Information: Provide a list that includes the name, address, and telephone number of the General Contractor and each subcontractor installing the product or equipment. Include local representatives and service organizations most convenient to the project site. Provide the name, address, and telephone number of the product or equipment manufacturers.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.1 ATTACHMENTS

A. The following forms have been included in this Section. See Division 26 for additional Electrical forms.

1. Exhibit A: Project Information
2. Exhibit B: Performance Verification and Demonstration to Owner
3. Exhibit C: Voltage and Amperage Readings
4. Exhibit D: DELETED
5. Exhibit E: Check-Out Memo
6. Exhibit F: D-C High Voltage Cable Test Report
7. Exhibit G: Ground Test Information
8. Exhibit H: Spare Parts Certification Memo
9. Exhibit I: Conductor Insulation Resistance Test Memo
10. Example: Description Sheet – Cover
11. Example: Description Sheet – Spline

END OF SECTION 01 78 23

EXHIBIT A
PROJECT INFORMATION

Contractor shall fill in the blanks below and insert in the Operating and Maintenance Manuals. Submit one (1) sheet for each major division of Work.

Project Name: _____

Specification Division Number & Name: _____

Subcontractor: _____

Contact: _____ Phone: _____

Date Project Bid: _____

Project Start Date: _____

Days allowed for Construction: _____

Target Completion: _____

Substantial Completion Certification Date: _____

	Date Submitted	Date Provided
Close-out Documentation Manual:		
Operating and Maintenance Manuals:		
Owner Performance Verification and Demonstrations:		
Manufacturer's Performance Verification Memos:		
Manufacturer's Test Data:		
Record Documents:		

EXHIBIT B
PERFORMANCE VERIFICATION AND DEMONSTRATION TO OWNER

This form verifies that the FAA has been given a demonstration of the proper operation on the equipment or systems noted below.

Project Name:_____
Specification Division Number & Name:_____

Equipment/Systems Demonstrated: _____

Along with a complete demonstration of the equipment/system, these items have been reviewed at this demonstration and shall be included in the Operating and Maintenance Manuals, under the appropriate specification section:

1) Written operating instructions.
2) Test data and performance verification information as required by the installer and/or manufacturer.
3) Maintenance information published by manufacturer's representative.
4) Check-out Memo signed by manufacturer's representative.
5) Printed warranties by manufacturer of equipment.
6) Explanation of the warranty/guarantee on the system.
7) Prints showing actual "As-Built" conditions.

_____ _____
(Name of General Contractor) (Signature, Title, Date)

_____ _____
(Name of Subcontractor) (Signature, Title, Date)

A demonstration of the system/equipment in operation and of the maintenance procedures has been successfully completed.

FEDERAL AVIATION ADMINISTRATION

_____
(Signature, Date)

EXHIBIT C
VOLTAGE AND AMPERAGE READINGS

Project Name: _____

Switchgear/Panelboard: _____

Full Load Amperage Readings: Date: _____
Time: _____

Phase A: _____
Phase B: _____
Phase C: _____
Neutral: _____
Ground: _____

Full Load Voltage Readings: Date: _____ Time: _____

Phase:	A to N	A to B
	B to N	A to C
	C to N	B to C

Contractor's Representative: _____
Date

Engineer's
Representative: _____
Date

FAA's Authorized Representative: _____
Date

EXHIBIT E
CHECK-OUT MEMO

This form shall be completed and a copy provided to the FAA at the FAA's Performance Verification and Demonstration meeting. A copy shall also be included in the specification section of the Operating and Maintenance Manual for the equipment checked.

Project Name:_____
Type of Equipment Checked:

_____

Equipment Number: _____

Name of Equipment Manufacturer:

_____

Signature below by the Manufacturer's authorized representative signifies that the equipment has been satisfactorily tested and checked out on the job by the manufacturer.

1. The attached Test Data and Performance Verification information was used to evaluate the equipment installation and operation.

2. The equipment is properly installed, has been tested by the manufacturer's authorized representative, and is operating satisfactorily in accordance with all requirements, except for items noted below.*

3. Written operating and maintenance information has been presented to the Contractor, and gone over with him in detail.

4. Sufficient copies of all applicable operating and maintenance information, part lists, lubrication checklists, and warranties have been furnished to the contractor for insertion in the Operating and Maintenance Manuals.

Manufacturer's Representative:_____
(Print or Type Name and Title)

_____
(Print or Type Address and Phone Number)

Signature of Manufacturer's Representative: _____
Date Checked

Witnessed By:

_____
(Signature and Title of Contractor's Representative)

*Exceptions Noted at Time of Check-Out: (Use additional pages if necessary)

EXHIBIT F
D-C HIGH VOLTAGE CABLE TEST REPORT

Project Name: _____
Location: _____

Description: _____
Rated Voltage: _____

TEST DATA

Set Leakage at Test Voltage_____ma Variac _____

Pri. Voltage_____ Sphere
Gap_____Inches

Duct Temp._____ Ambient Temp._____Weather_____
Cable Status_____1 hour prior tests.

TEST RESULTS

Phase or conductor	A	B	C	Remarks
Starting Time				
0				
15 sec.				
30 sec.				
45 sec.				
1 min.				
2 min.				
3 min.				
4 min.				
5 min.				

Final Test voltage:_____ Time Finish: _____

KV DC After 1 Min.: Test Procedure_____ No. Terminals _____
Joints_____
Witnessed By: _____
Performed By: _____

EXHIBIT G
GROUND TEST INFORMATION

Project Name: _____

Ground Type: _____

Test By: _____

Date of Test: _____

Ground Location: _____

Ground Type (rod, water pipe, etc.) _____

Prior to Connection to System: Ground: _____ (OHMS)

After Connection to System: Ground: _____ (OHMS)

Weather conditions (Wet/Dry) _____ Soil conditions (Wet/Dry): _____

Contractor's Representative: _____
Date

Engineer's Representative: _____
Date

FAA's Representative: _____
Date

EXHIBIT H
SPARE PARTS CERTIFICATION MEMO

This form shall be completed and a copy provided to the Owner at the Owner's Performance Verification and Demonstration meeting. A copy shall also be included in the specifications section of each Operations and Maintenance Manual for the equipment checked.

Name of Project:_____

Type of Spare Parts:_____

Specification Reference:_____

Quantity of Spare Parts:_____

Signature below by the Contractor and subcontractor signifies that the spare parts required by the drawings and/or specifications have been turned over to the FAA. Signature by the FAA acknowledges receipt of the same spare parts.

Name of General Contractor:_____

Authorized Signature and Title:_____

Date:_____

Name of RE:_____

Authorized Signature and Title:_____

Date:_____

EXHIBIT I
CONDUCTOR INSULATION RESISTANCE TEST MEMO

NAME OF PROJECT:_____

Conductor Location From:_____ To:_____

Size of Conductor_____

Insulation Type_____ Insulation Voltage Rating___
Date of Test_____ Time of Test_____
Weather Conditions_____
Test Voltage (DC)_____ Range _____
Megger Instrument/Serial Number _____
Testing Methodology _____

INSULATION RESISTANCE MEASUREMENT
(Acceptable Measurement not to be less than one (1) Megohm)

Phase A to Ground_____
Phase B to Ground_____
Phase C to Ground_____
Neutral to Ground_____
Isolated Ground to Ground_____
Name of General Contractor:_____

Authorized Signature and Title:_____
Date

Name of Consulting Engineer:_____

Authorized Signature and Title:_____
Date

Name of RE:_____

Authorized Signature and Title:_____
Date

EXAMPLE – Cover Sheet

FEDERAL AVIATION ADMINISTRATION

ATLANTA TRACON - A80

OPERATION AND MAINTENANCE BROCHURES

EXAMPLE – Spline

FAA

ATLANTA TRACON - A80

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ATLANTA TRACON - A80

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MAINTENANCE
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SECTION 01 78 36 - WARRANTIES AND GUARANTEES

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

A. Preparation and submittal of warranties and guarantees.

1.2 FORM OF WARRANTY

A. Bind in commercial quality 8 ½ x 11 inch three-ring side binders, with hardback, cleanable, plastic covers.

B. Label cover of each binder with typed or printed title `WARRANTIES AND GUARANTEES', with Contract No. and Project Title; name, address and telephone number of Contractor.

C. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified and the name of the product or work item.

D. Separate each warranty or guaranty with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheet as necessary. List subcontractor, supplier and manufacturer, with name, address and telephone number of responsible principal.

1.3 PREPARATION OF WARRANTY

A. Obtain warranties and guarantees, executed in duplicate by responsible subcontractors, suppliers and manufacturers, within ten (10) days after completion of the applicable item of work. Date of beginning of time of warranty will be the date of Substantial Completion.

B. Warranties and guarantees shall be made out in the name of, and accrue to the benefit of the Federal Aviation Administration.

1.4 TIME OF WARRANTY

A. Provide warranties prior to final acceptance.

B. For items of work when acceptance is delayed beyond date of Substantial Completion, submit within ten (10) days after acceptance, listing the date of acceptance as the beginning of the warranty or guaranty period.

1.5 EQUIPMENT WARRANTY TAGS AND GUARANTEE LOCAL REPRESENTATIVES

A. The Contractor shall furnish with each guarantee, the name address, and telephone number of the

guarantor, the name, address, and telephone number of the guarantor's representative nearest to the site, who, upon request of the FAA representative, will honor the guarantee during the guaranty period and will provide the service prescribed by the terms of the guarantee. At the time of installation, the Contractor shall tag each item of warranted equipment with a durable, oil and water resistant tag approved by the RE. Tag shall be attached with copper wire and sprayed with a clear silicone, waterproof coating. Leave the date of acceptance and inspectors signature blank until project is accepted for Substantial Completion. Tag shall show the following information:

B. Equipment warranty tags

1. Type of Equipment
2. Accepted Date
3. Warranted Until
4. Under Contract Number
5. Inspector's Signature

1.6 QUANTITY

A. Provide three (3) complete copies of warranties and guarantees.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 01 78 36

SECTION 01 78 39 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

A. This section describes the requirements for the creation and maintenance of "As Built Drawings;" referred to herein as Record Documents.

B. Maintenance of Record Documents.

C. Submittal of Record Documents.

1.2 MAINTENANCE OF DOCUMENTS AND SAMPLES

A. Store Record Documents in Field Office apart from documents used for construction. Provide files, racks and secure storage for Record Documents.

B. Maintain Record Documents in clean, dry and legible conditions. Do not use Record Documents for construction purposes.

C. Keep Record Documents and Samples available for inspection by FAA.

1.3 AS-BUILT INFORMATION

A. Record information on a set of full size drawings, provided by FAA.

B. Provide felt tip marking pens, maintaining separate colors for each major system, for recording information.

C. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.

D. Contract Drawings and approved Shop Drawings: Legibly mark each item to record actual construction, including:

1. Measured depths of elements of foundation in relation to finish grade or first floor datum.
2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction.
4. Field changes of dimensions and details.
5. Changes made by Addenda, Change Order(s) (if any) and Work Order(s) (if any).
6. Details not on original Contract Drawings.
7. References to related Shop Drawings and Modifications.

E. Specifications: Legibly mark each item to record actual construction, including changes made by Addenda and Change Order.

F. Other Documents: Maintain manufacturer's certification, inspection certifications, field test records, and training documents required by individual Specification Sections.

1.4 SUBMITTALS

A. At Substantial Completion, deliver Record Documents and samples under provision of Section 01 77 00, "CLOSEOUT PROCEDURES".

B. Provide Portable Document Format (PDF) file of all record drawings on 700+ MB compact disk or other approved electronic media and upload PDF to FAA's KSN website.

C. Provide CAD-produced drawing (MicroStation) drawing(s) of all underground utilities including location, elevation, and size of all pipes, conduits, manholes, drainage structures, ductbanks, etc. Provide .dgn and .pdf files of same.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 01 78 39